



# Applicant's Comments on Responses to the Examining Authority's Third Round of Written Questions

Applicant: Norfolk Boreas Limited Document Reference: ExA.WQR-3.D8.V1

Deadline 8

Date: April 2020 Revision: Version 1

Author: Royal HaskoningDHV

Photo: Ormonde Offshore Wind Farm





Date	Issue No.	Remarks / Reason for Issue	Author	Checked	Approved
24/03/2020	01D	First draft for internal review	CD/DT/JT/EV	VR	JL
31/03/2020	01F	Final for submission at Deadline 7	CD/DT/JT/EV	VR	JL
08/04/2020	02F	Final for submission at Deadline 8	CD/DT/JT/EV	VR	JL







### **Table of Contents**

1	Archaeology and Heritage Assets	. 12
1.0	Offshore and intertidal archaeology	. 12
1.1	Onshore archaeology	. 12
1.2	Onshore heritage assets	. 12
2	Biodiversity, Biological Environment and Ecology	. 13
2.0	Offshore benthic and marine mammals	. 13
2.1	Offshore ornithology	. 15
3	Compulsory Acquisition	. 25
3.0	Compulsory Acquisition	. 25
4	Cumulative effects of other proposals	. 45
4.0	General cumulative effects, including phasing	. 45
4.1	Onshore cumulative effects of other proposals (construction)	. 45
5	Development Consent Order and Deemed Marine Licences	. 45
5.0	General	. 45
5.1	Articles	. 46
5.2	SCHEDULE 1 PART 1: Authorised Development	. 49
5.3	SCHEDULE 1 PART 3: Requirements	. 49
5.4	OTHER REQUIREMENTS	. 57
5.5	SCHEDULES 9 to 13: Deemed Marine Licences	. 57
5.6	SCHEDULE 15: ARBITRATION RULES	. 63
5.7	SCHEDULE 16: PROCEDURE FOR DISCHARGE OF REQUIREMENTS	. 63
5.8	SCHEDULE 17: PROTECTIVE PROVISIONS	. 65
5.9	CONSENTS, LICENCES AND OTHER AGREEMENTS	. 66
6	Fishing and fisheries	. 66
6.0	Fishing and fisheries	. 66
7	Grid connection	. 72
7.0	Grid connection	. 72
8	Habitats Regulation Assessment	. 73
8.0	River Wensum SAC	. 73
8.1	Norfolk Valley Fens SAC	. 73
8.2	Southern North Sea SAC	. 74
8.3	Hasiborough, Hammond and Winterton SAC	. 74
8.4	Offshore ornithology	. 79





8.5	Greater Wash SPA81
8.6	Flamborough and Filey Coast SPA, Alde-Ore Estuary SPA and Haisborough Hammond and Winterton SAC81
8.7	Flamborough and Filey Coast SPA82
9	Landscape and Visual Effects84
9.0	The Applicant's landscape and visual assessment
9.1	The Applicant's visual assessment
9.2	Alternatives considered86
9.3	Landscape effects87
9.4	Visual effects
9.5	Outline Landscape and Ecological Management Strategy (OLEMS) 88
9.6	Good Design
9.7	Matters arising from the accompanied site inspection (ASI) on Thursday 23 <sup>rd</sup> January91
10	Marine and Coastal processes91
10.0	Marine and Coastal processes91
11	Navigation91
11.0	Navigation91
12	Onshore construction effects91
12.0	Cable corridor and ducting91
12.1	Mobilisation areas95
12.2	Noise and Vibration95
12.3	Construction Hours
13	Socio-economic effects
13.0	Skills and Employment Strategy
13.1	Jobs
13.2	Tourism
13.3	Land use and Agriculture
13.4	Public Health
13.5	Other offshore industries and activities
14	Traffic and transportation
14.0	Outline Traffic Management Plan (OTMP)107
14.1	Highway Intervention Scheme for Link 34 (B1145 through Cawston) 107
14.2	Cable Logistics Area (CLA) along Link 89 in Outlon
14.3	Link 69 Little London Road in North Walsham from the B1145 Lyngate Road to an access point 210m east
14.4	Outline Access Management Plan and Access to Works Plan 112





15	Water Resources and Flood Risk	113
15.0	Water Resources and Flood Risk	113
16	General	117
16.0	General	117
16.1	Environmental Statement (ES)	121
16.2	Ground conditions and contamination	121





# **Glossary of Acronyms**

AEol	Adverse Effect on Integrity		
AEZ			
AIS	Archaeological Exclusion Zone  Air Insulated Switchgear		
ALO	Air Insulated Switchgear  Agricultural Liaison Officer		
AOE	Alde Ore Estuary Area of Natural Beauty		
AONB	·		
BAT	Best Available Technique		
BDC	Broadland District Council		
ВРМ	Best Practical Means		
BoR	Book of Reference		
CA	Compulsory Acquisition		
CfD	Contracts for Difference		
CGR	Counterfactual Growth Rate		
CNMP	Construction Noise Management Plan		
CAOS	Compulsory Acquisition Objections Schedule		
СоСР	Code of Construction Practice		
CPS	Counterfactual Population Size		
CRM	Collision Risk Modelling		
CSIMP	Cable Specification Installation and Monitoring Plan		
CWS	County Wildlife Site		
DAS	Design and Access Statement		
dBA	A-weighed Decibels		
DC	Direct Current		
DCO	Development Consent Order		
dDCO	Draft Development Consent Order		
DML	Deemed Marine Licence		
EA	Environment Agency		
EIA	Environmental Impact Assessment		
EIFCA	Eastern Inshore Fisheries and Conservation Association		
EMF	Electromagnetic Field		
ES	Environmental Statement		
ExA	Examining Authority		
FFC	Flamborough and Filey Coast		
FID	Final Investment Decision		
FLCP	Fisheries Liaison and Co-Existence Plan		
FLO	Fisheries Liaison Officer		
FLOWW	Fishing Liaison with Offshore Wind and Wet Renewables Group		
FRA	Flood Risk Assessment		
GB	Great Britain		
GIS	Gas Insulated Switchgear		
GW	Gigawatts		
HDD	Horizontal Directional Drilling		
HGV			
	Heavy Goods Vehicle		
HHW	Haisborough Hammond and Winterton		
HIS	Highway Intervention Scheme		





HoTs	Heads of Terms	
HRA	Habitats Regulations Assessment	
HVAC	High Voltage Alternating Current	
HVDC	High Voltage Direct Current	
IPMP	In Principle Monitoring Plan	
IROPI	Imperative Reason of Overriding Public Interest	
km	Kilometres	
Kv	Kilovolts	
LIR	Local Impact Report	
LVIA	Landscape and Visual Impact Assessment	
М	Metres	
MCA	Maritime and Coastguard Agency	
MCZ	Marine Coastal Zone	
MGN	Marine Guidance Note	
MHWS	Mean High Water Springs	
ММО	Marine Management Organisation	
MPA	Marine Protected Area	
MSFD	Marine Strategy Framework Directive	
MW	Megawatts	
NCC	Norfolk County Council	
NE	Natural England	
NFFO	National Federation of Fishermen's Organisations	
NFU	National Farmers Union	
NG	National Grid	
NNDC	North Norfolk District Council	
NPPF	National Planning Policy Framework	
NPS	National Policy Statement	
NSIP	Nationally Significant Infrastructure Project	
OAMP	Outline Access Management Plan	
OCoCP	Outline Code of Construction Practice	
OFTO	Offshore Transmission Owner	
OLEMS	Outline Landscape and Ecological Management Strategy	
OODP	Outline Operational Drainage Plan	
OREI	Offshore Renewable Energy Installations	
ORM	Offshore Ring Main	
OS	Ordinance Survey	
OSPAR	The Convention for the Protection of the Marine Environment of the North-East Atlantic	
OTMP	Outline Traffic Management Plan	
OWF	Offshore Wind Farm	
OWIC	Offshore Wind Industry Council	
PEIR	Preliminary Environmental Information Report	
PPA	Performance Planning Agreement	
PPV	Predicted Vibration Impacts	
PSA	Particle Size Analysis	
PVA	Population Viability Analysis	
RFI	Request for Information Forms	





RPA	Relevant Planning Authorities	
RPM	Revolutions Per Minute	
RSA	Road Safety Audit	
RSPB	Royal Society for The Protection of Birds	
SAC	Special Area of Conservation	
SIP	Site Integrity Plan	
SNCB	Statutory Nature Conservation Body	
SNS	Southern North Sea	
SoCG	Statement of Common Ground	
SoR	Statement of Reasons	
SoS	Secretary of State	
SoV	Service Operation Vehicle	
SPA	Special Protection Area	
TH	Trinity House	
TWT	The Wildlife Trusts	
UK	United Kingdom	
WCS	Worst Case Scenario	
WDC	Whale and Dolphin Conservation	
WQ	Written Question	
WSI	Written Scheme of Investigation	





# **Glossary of Terminology**

Array cables	Cables which link wind turbine to wind turbine, and wind turbine to offshore electrical platforms.	
Cable logistics area	Existing hardstanding area to allow the storage of cable drums and associated materials and to accommodate a site office, welfare facilities and associated temporary infrastructure to support the cable pulling works.	
Cable pulling	Installation of cables within pre-installed ducts from jointing pits located along the onshore cable route.	
Ducts	A duct is a length of underground piping, which is used to house electrical and communications cables.	
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and information to support the HRA.	
Interconnector cables	Offshore cables which link offshore electrical platforms within the Norfolk Boreas site.	
Jointing pit	Underground structures constructed at regular intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.	
Landfall	Where the offshore cables come ashore at Happisburgh South.	
Landfall compound	Compound at landfall within which HDD drilling would take place.	
Landfall compound zone	Area within which the landfall compounds would be located.	
Link boxes  Underground chambers or above ground cabinets next to the cable thousing low voltage electrical earthing links.		
Mobilisation area	Areas approx. 100 x 100m used as access points to the running track for duct installation. Required to store equipment and provide welfare facilities. Located adjacent to the onshore cable route, accessible from local highways network suitable for the delivery of heavy and oversized materials and equipment.	
Mobilisation zone	Area within which a mobilisation area would be located.	
National Grid new / replacement overhead line tower	New overhead line towers to be installed at the National Grid substation.	
National Grid overhead line modifications	The works to be undertaken to complete the necessary modification to the existing 400kV overhead lines.	
National Grid overhead line temporary works	Area within which the work will be undertaken to complete the necessary modification to the existing 400kV overhead lines.	
National Grid substation extension	The permanent footprint of the National Grid substation extension.	
National Grid temporary works area	Land adjacent to the Necton National Grid substation which would be temporarily required during construction of the National Grid substation extension.	
Necton National Grid substation	The grid connection location for Norfolk Boreas and Norfolk Vanguard.	
Norfolk Boreas site	The Norfolk Boreas wind farm boundary. Located offshore, this will contain al the wind farm array.	
Norfolk Vanguard	Norfolk Vanguard offshore wind farm, sister project of Norfolk Boreas.	
Offshore service platform	e platform  A platform to house workers offshore and/or provide helicopter refuelling facilities. An accommodation vessel may be used as an alternative for housing workers.	
Offshore cable corridor	The corridor of seabed from the Norfolk Boreas site to the landfall site within	





Offshore electrical platform	A fixed structure located within the Norfolk Boreas site, containing electrical equipment to aggregate the power from the wind turbines and convert it into	
Offshore export cables	a suitable form for export to shore.  The cables which transmit power from the offshore electrical platform to the	
	landfall.	
Offshore project area	The area including the Norfolk Boreas site, project interconnector search area and offshore cable corridor.	
Onshore cable route	The up to 35m working width within a 45m wide corridor which will contain the buried export cables as well as the temporary running track, topsoil storage and excavated material during construction.	
Onshore 400kV cable route	Buried high-voltage cables linking the onshore project substation to the Necton National Grid substation.	
Onshore cables	The cables which take power and communications from landfall to the onshore project substation.	
Onshore infrastructure	The combined name for all onshore infrastructure associated with the project from landfall to grid connection.	
Onshore project area	The area of the onshore infrastructure (landfall, onshore cable route, accesses, trenchless crossing zones and mobilisation areas; onshore project substation and extension to the Necton National Grid substation and overhead line modifications).	
Onshore project substation	A compound containing electrical equipment to enable connection to the National Grid. The substation will convert the exported power from HVDC to HVAC, to 400kV (grid voltage). This also contains equipment to help maintain stable grid voltage.	
Onshore project substation temporary construction compound	Land adjacent to the onshore project substation which would be temporarily required during construction of the onshore project substation.	
Overhead Line	An existing 400kV power line suspended by towers.	
Pre sweeping	The practice of dredging the seabed to prepare it for foundation or cable installation. It is either used to provide a level surface on which to place foundations or to allow cables to be installed at a sufficient depth to minimist the chance of them becoming exposed.	
Project interconnector cable	Offshore cables which would link either turbines or an offshore electrical platform in the Norfolk Boreas site with an offshore electrical platform in one of the Norfolk Vanguard sites.	
Project interconnector search area	The area within which the project interconnector cables would be installed.	
Running track	The track along the onshore cable route which the construction traffic would use to access workfronts.	
Safety zones	An area around a vessel which should be avoided during offshore construction.	
Scour protection	Protective materials to avoid sediment being eroded away from the base of the foundations as a result of the flow of water.	
The Applicant	Norfolk Boreas Limited	
The Norfolk Vanguard OWF sites	Term used exclusively to refer to the two distinct offshore wind farm areas, Norfolk Vanguard East and Norfolk Vanguard West (also termed NV East and NV West) which will contain the Norfolk Vanguard arrays.	
The project	Norfolk Boreas Wind Farm including the onshore and offshore infrastructure.	
Transition pit	Underground structures that house the joints between the offshore export cables and the onshore cables	
Trenchless crossing Pairs of compounds at each trenchless crossing zone to allow be compound place from either side of the crossing.		





Trenchless crossing zone	Areas within the onshore cable route which will house trenchless crossing entry and exit points.
Workfront	A length of onshore cable route within which duct installation works will occur, approximately 150m.





# The Applicant's Responses to the Examining Authority's Third Round of Written Questions in regard to the Norfolk Boreas Application.

Following the decision taken to postpone all future hearings and Accompanied Site Inspections by the Examining Authority (ExA), a third round of Written Questions (WQs) was published on 23 March 2020.

The Applicant has responded to each of their relevant questions, detailed in numerical order in Sections 1 to 16 of this document.

The Applicant has provided comments on responses from interested parties to the third round of written questions that were submitted for, and published at, Deadline 7.

The Applicant has not included the questions where a response has not been submitted by an Interested Party at Deadline 7.





### 1 Archaeology and Heritage Assets

### 1.0 Offshore and intertidal archaeology

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			No Questions	

# 1.1 Onshore archaeology

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			No Questions	

### 1.2 Onshore heritage assets

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.1.2.1	The Applicant	Cawston Conservation Area and listed buildings What if anything is being undertaken to address Broadland District Council's ongoing concerns regarding vibration effects which could affect the Cawston Conservation Area and listed buildings fronting High Street [REP5-053, Table 1] and [REP6-026, Table 6 and Appendix 2]?	The Applicant is undertaking an assessment of potential noise, vibration and air quality effects of the Cawston Revised Highway Intervention Scheme (HIS), which is part of a package of mitigation measures that would serve to reduce traffic impacts through Cawston (Link 34, B1145). In this assessment consideration will be given to the presence of listed building fronting High Street. This will be submitted at Deadline 8.	
Q3.1.2.2	The Applicant	Noise and vibration effects on the Cawston Conservation Area and listed buildings  Parties to provide any additional information to assist the ExA in reaching its recommendation to the SoS.	The Applicant will provide further information in the Clarification Note on the potential noise, vibration and air quality effects of the Cawston Revised Highway Intervention Scheme to be submitted at Deadline 8.	
Q3.1.2.2	Broadland District Council	Noise and vibration effects on the Cawston Conservation Area and listed buildings  Parties to provide any additional information to assist the ExA in reaching its recommendation to the SoS.	Currently no further information to comment upon. It is understood that the applicant will provide an updated report in this respect to be submitted at deadline 7. The District Council will review it and submit written comments at a subsequent deadline.	The Applicant has produced a Clarification Note [ExA.AS-2.D8.V1], submitted at Deadline 8, which provides further information on the potential noise, vibration and air quality effects of the Cawston Revised Highway Intervention Scheme (HIS), which is part of a package of mitigation measures that would serve to reduce traffic impacts through Cawston (Link 34, B1145). The revised HIS was detailed in the Outline Traffic Management Plan (OTMP) submitted at Deadline 5 [REP5-026].  The findings of the vibration assessment noted that although the frequency of vibrational transfer events from HGV movements along Link 34 to each building during the scheme during working hours (09:00 to 15:00 and 16:00 to 18:00) will occur more often, the predicted impacts are not significant. When using a conservative approach, using the highest measured level from the baseline survey at each of the four receptor locations (representative of listed and residential dwellings along Link 34 and including a listed building on the High Street), the predicted vibration impacts (PPV) on buildings, including those designated as listed buildings, are below the threshold level for cosmetic damage (detailed in Table 3.2 of the Clarification Note [ExA.AS-2.D8.V1]).





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
				As the predicted vibration impacts on buildings, including those designated as listed buildings, are below the threshold level for cosmetic damage no further mitigation is required.

### 2 Biodiversity, Biological Environment and Ecology

### 2.0 Offshore benthic and marine mammals

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.2.0.1	The Applicant	Marine Mammal Monitoring: The Applicant to comment on NE's wording in [REP6-050] to be included in the Generation DMLs Schedules 9 and 10, which would link with the marine mammal monitoring requirements within the IPMP.	As stated in the IPMP's Guiding principles [document 8.12, REP5-031] "All consent conditions, which would include those for monitoring, should be "necessary, relevant to planning, relevant to the permitted development, enforceable, precise and reasonable in all other respects" as set out in Paragraph 206 of the National Planning Policy Framework and referred to as the 'six tests' (Department for Communities and Local Government, 2018)."	
			The Applicant does not consider that the conditions which Natural England have suggested are precise and reasonable, relevant to planning, or indeed necessary. For the following reasons:  • The conditions are not precise and reasonable, in particular the following wording:  "required to test predictions in the environmental statement".  There are many predictions made within the ES and therefore the Applicant is unclear to which predictions this statement refers. In addition, compliance with this wording could be used to place an unreasonable burden on the Applicant to undertake very extensive monitoring without a clear need to do so.  • The wording of the two conditions does not focus on any specific aspect of marine mammal monitoring and therefore its openended nature would mean that it is not enforceable.  • Most importantly the proposed conditions are not necessary. The guiding principles within the IPMP state that: "monitoring should be targeted to address significant evidence gaps or uncertainty, where there is potential for a significant environmental impact."  Chapter 12 of the Environmental Statement Marine Mammals [APP-212] concluded no significant impacts on marine mammals and Natural England, through the Statement of Common Ground [AS-028] has agreed with these conclusions. As recognised by Natural England in their Relevant Representation [RR-099] marine mammal assessment issues are likely to be very similar across projects and it may be that monitoring is best undertaken at or between several projects to address these issues and find answers to the original questions. The Applicant agrees with this statement	
			and therefore considers that a contribution to strategic monitoring is likely to be more beneficial then anything undertaken at a project level. The inclusion of monitoring at a strategic level would be best enforced through agreement, with	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number	dddiessed to.			
			the MMO and Natural England, of the final, Southern North Sea Site Integrity Plan.	
			In summary, the Applicant considers that the conditions proposed by Natural England are not necessary and furthermore, in their current form, they are not sufficiently precise to ensure that relevant data gaps are filled and would not be enforceable. As stated in the Applicant's response to further written questions [REP5-045] the Applicant's position is that given the low contribution of the project to marine mammal impacts any marine mammal monitoring should be undertaken at a strategic level. The wording provided within the IPMP allows for the participation of Norfolk Boreas in any strategic monitoring as required at the time of agreement of the final plans and therefore it is not necessary to include a specific condition within the DCO to commit the Applicant to marine mammal monitoring. Furthermore, due to the fact that the Norfolk Boreas project would make a relatively low contribution to any marine mammal impacts, it is not appropriate to include a condition within the DCO given similar conditions have not been included in DCOs for other wind farms to be constructed in the same area.	
Q3.2.0.1	Marine Management Organisation	Marine Mammal Monitoring: The Applicant to comment on NE's wording in [REP6-050] to be included in the Generation DMLs Schedules 9 and 10, which would link with the marine mammal monitoring requirements within the IPMP.	The MMO has discussed this further with the Applicant and understands their position is that a condition is not required. The MMO understands the Applicant is still willing to review and discuss the possibility of adding a condition.  The MMO believes that the condition provided by Natural England (NE) in REP6-050 is not suitable.  The MMO is continuing discussions with the Applicant and NE to work together to see if an agreement can be reached on this point.	This was discussed further on a call with the MMO on the 3 <sup>rd</sup> of April and it was agreed by both parties that as currently worded the conditions which Natural England have proposed are not suitable. The Applicant understands that the MMO and Natural England are in further discussions over the suitability of the proposed conditions and there will be further updates at Deadline 9.
Q3.2.0.2	The Applicant	<ol> <li>Sandeel:         <ol> <li>Applicant to state its position regarding MMO's request for a further update to the IPMP for sediment sampling for particle size analysis in respect of habitat suitability for sandeel.</li> <li>The Applicant and MMO to provide any additional information to assist the ExA in making its recommendation regarding sediment sampling to the SoS.</li> </ol> </li> </ol>	1. As outlined in Version 3 of the Statement of Common Ground with the MMO [REP6-029] the Applicant has included text within the IPMP which would ensure that, if sediment sampling were to be undertaken, this would then be analysed for sandeel habitat suitability.  In their comments on responses to written questions [REP6-045] the MMO proposes a slight addition to the text, which the Applicant has agreed to include. Therefore, an updated version of the IPMP (document reference 8.12), containing the proposed amendment has been submitted at Deadline 7. The wording now states (the Additional text is underlined):  "As explained in section 4.3.2, if at the time of completion of the final detailed plan there is good, evidence based, justification for increasing the scope of the benthic surveys this will be agreed with the MMO and included within the final plans. If a scope increase for the benthic surveys included sediment sampling within the wind farm site for the purpose of Particle Size Analysis (PSA), the data from that survey could be used to better understand any changes in habitat suitability for sandeels. This would be agreed with the MMO though the final plan."  Both parties consider this preferable to using geophysical data to determine sediment characteristics and therefore habitat suitability for sandeels.	





Ennancing Society				
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			2. As the Applicant and the MMO both consider that this issue is now resolved the Applicant has no additional information to provide.	
Q3.2.0.2	Marine Management Organisation	<ol> <li>Sandeel:         <ol> <li>Applicant to state its position regarding MMO's request for a further update to the IPMP for sediment sampling for particle size analysis in respect of habitat suitability for sandeel.</li> <li>The Applicant and MMO to provide any additional information to assist the ExA in making its recommendation regarding sediment sampling to the SoS.</li> </ol> </li> </ol>	1. The MMO understands the Applicant has agreed to amend the In Principle Monitoring Plan (IPMP) with the proposed wording in REP6-045. The MMO will review the updated IPMP and provide confirmation of agreement within the Statement of Common Ground (SoCG) at Deadline 8.  2. The MMO believes this point is not related to habitat suitability for sandeel but is related to the particle size analysis of dredged material to be disposed of within the Haisborough, Hammond and Winterton (HHW) Special Area of Conservation (SAC).  The MMO understands the Applicant's position is that the additional mitigation/design amendments proposed for dredge and disposal within the HHW SAC in (Question 2.8.3.1, REP5-045) is enough to not require a condition on this matter. However, the applicant is willing to discuss this further to find agreement.  The MMO has a number of concerns in relation to the previous conditions set out during Norfolk Vanguard Examination and in point 7 of the SoS letter (Dated 6 December 2019) and how these would be enforceable.  The MMO is still working with the Applicant and Natural England to find agreement on this matter.	1. The Applicant is in agreement with the MMO on this matter.  2. With regard to the need for a condition specifying particle size as discussed during ISH4 the Applicant has the following comments.  As noted by Natural England during ISH4, it may be very difficult to satisfy, monitor or enforce a condition which requires disposed sediment to be 95% similar to the sediment of the seabed on which it is being disposed. The Applicant concurs with this position and discussed the issue further with Natural England during a meeting on the 17th February 2020, during which Natural England referred the Applicant to the disposal principles which Hornsea Project Three were developing. The Applicant has also met with Hornsea Project Three to discuss this issue and it is apparent that many of the disposal principles that the Applicant has already committed to are similar to those which have been adopted by that project. For example, the commitment to maintaining the sediment within the SAC.  Additional principles which Hornsea Project Three have committed to which the Applicant has not, all relate to interpretation of existing data to determine the 'global properties' of the sea bed sediments. Natural England have informed the Applicant that the disposal principles for Hornsea Project Three have not been fully agreed and they have further questions over how these could be applied, as does the Applicant.  The Applicant has made a number of firm commitments which have not been made by Hornsea Project Three. These are:  Commitment to dispose of material using a fall pipe;  Disposing of material as close as possible to where it was dredged from; and  Disposing of material up drift so that it infills.  The Applicant is very confident that with these commitments there will be no significant change to sediment composition of the seabed. The Applicant also considers that this is the most appropriate method of ensuring that the sediment characteristics remain the same. It is noted that Hornsea Project Three's position is also that a

# 2.1 Offshore ornithology

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.2.1.1	The Applicant	PVA Modelling:	1. The Applicant does not consider this to be an area of disagreement	
			with Natural England. The Applicant provided PVA outputs in REP2-035	
			obtained using the Natural England PVA tool for those species that	





Enhancing Society				
PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
Number		1. The Applicant and IDs to state their final position on DVA	Network Foreign dead in advance are wind and with preference to a victim a DVA	
		<ol> <li>The Applicant and IPs to state their final position on PVA modelling, and whether agreement is possible within the</li> </ol>	Natural England advised was required, and with reference to existing PVA	
		Examination.	results for other species.	
		The Applicant and IPs to provide any additional	The Applicant considers there were two aspects of the PVA modelling,	
		information to assist the ExA in making its	submitted in REP2-035 which Natural England highlighted in their	
		recommendation to the SoS.	comments (REP4-040) as being areas to be resolved. These were: (1) the	
			fact that the PVA models conducted by the Applicant used the original	
			version of the NE PVA tool (as this was the only one available at that time)	
			with the consequence that the PVA would potentially need to be re-run	
			following an update to the tool; and (2) that, for two of the species	
			(kittiwake at the North Sea scale and guillemot at the Flamborough and	
			Filey Coast SPA scale), the results provided were obtained from a smaller	
			number of simulations (500) than the recommended minimum (1,000).	
			This was due to errors encountered when attempting to run the model	
			for larger numbers of simulations (although it was not clear why these	
			errors occurred as the online tool did not provide a detailed error	
			message).	
			message).	
			Natural England initially advised (REP4-040) that as the PVA tool was due	
			to be updated the Applicant should re-run the models when the revised	
			version became available. However, in response to the Examiners' second	
			written questions (REP5-077, WQ 2.2.2.1) Natural England stated that,	
			having checked the revised model (prior to it being made publicly	
			available):	
			'we are not aware that the updates will make a significant difference	
			to the counterfactual metric outputs of models run using the	
			previous/currently available version of the tool'	
			previous/earrently available version of the tool	
			And that as a consequence;	
			'Therefore, we will use the counterfactual of population size (CPS) and	
			counterfactual of growth rate (CGR) metric outputs from models run	
			by the Applicant using the previous version of the tool as presented in	
			the Deadline 2 updated assessments [REP2-035].'	
			Therefore with respect to the first issue shows /the requirement to re-	
			Therefore, with respect to the first issue above (the requirement to re-run the PVA models following the update), the Applicant considers that	
			Natural England is satisfied this is not required and the current outputs	
			(REP2-035) are agreed to be robust and appropriate by both the Applicant and Natural England.	
			and Ivaculal Eligianu.	
			With respect to Natural England's second concern (regarding the	
			potential unreliability of PVA outputs derived from 500 simulations), the	
			Applicant has successfully undertaken comparative simulations using the	
			updated PVA tool for the two species in question (kittiwake at the EIA	
			cumulative scale and guillemot at the Flamborough and Filey Coast SPA	
			scale) with model runs of 1,000 and 5,000 simulations. The counterfactual	
			outputs obtained from these model runs have been compared with those	
			for 500 runs presented in REP2-035 and this has been submitted at	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number			Deadline 7 (ExA;AS-7.D7.V1). This comparison has demonstrated that the results obtained from larger numbers of simulations are virtually indistinguishable from those for 500 simulations. For example, the largest difference in the counterfactual of growth rate, between that for 500 simulations and that for 5,000 simulations, was 0.004%. For the counterfactual of population size the largest differences were 0.14% (also for 500 compared with 5,000 simulations). Furthermore, the differences between the 500 and larger run estimates (obtained for different mortality scenarios) were found to be both positive and negative (i.e. in some cases the outputs for 500 simulations were slightly higher and in other cases the outputs for 1,000 or 5,000 were slightly higher). Thus there is no indication of bias in the results.  In summary the Applicant considers that both of Natural England's concerns with the PVA results have been addressed and there are no further outstanding issues.	
			2. The Applicant considers that the PVA results reported in REP2-035 are robust and appropriate for impact assessment purposes. This position has been supported by Natural England's review (REP4-040) and their response to WQ2.2.2.1 (REP5-077), with the exception of the points discussed above, which have now been demonstrated to have no effect on the outputs (ExA.AS-7.D7.V1).  The Applicant considers that, on the basis of the PVA counterfactual measures discussed in REP2-035, it has been demonstrated that there will	
			be no significant effects due to Norfolk Boreas alone and cumulatively with other plans and projects for any species and there is no risk of an adverse effect on the integrity (AEoI) of any designated SPA feature due to Norfolk Boreas alone and in-combination with other plans and projects.	
Q3.2.1.1	Marine Management Organisation	PVA Modelling:  1. The Applicant and IPs to state their final position on PVA modelling, and whether agreement is possible within the Examination.  2. The Applicant and IPs to provide any additional information to assist the ExA in making its recommendation to the SoS.	The MMO defers to Natural England on PVA modelling.	The Applicant acknowledges the MMO's response to this question and has provided a comment in response to Natural England's response below.
Q3.2.1.1	Marine Management Organisation	PVA Modelling:  1. The Applicant and IPs to state their final position on PVA modelling, and whether agreement is possible within the Examination.  2. The Applicant and IPs to provide any additional information to assist the ExA in making its recommendation to the SoS.	Natural England has advised the Applicant (in an email dated 03/03/2020) that version 2 of the PVA Tool has been uploaded and a link to the new version was sent to the Applicant. The guidance documents etc. have also been updated and are available from the links sent to the Applicant. In REP6-014 the Applicant states that they propose to attempt to re-run models where Natural England has indicated insufficient simulations were conducted (i.e. fewer than 1,000), which Natural England welcomes. The Applicant also notes in REP6-014 that they have attempted to re-run the PVA models and the same errors have been encountered i.e. the model runs successfully for smaller numbers of simulations (e.g. 500) but fails for higher numbers (e.g. 1,000). The Applicant has contacted Natural England	The Applicant confirms that outputs from the revised PVA model from simulations with 1,000 and 5,000 iterations were presented at Deadline 7 [REP7-031] for those examples where previously it was only possible to successfully undertake smaller runs of 500 simulations (kittiwake EIA and guillemot for Flamborough and Filey Coast Special Protection Area; REP2-035). The additional outputs have demonstrated that there is virtually no difference in the counterfactual metrics with 500, 1,000 and 5,000 simulations. The largest difference obtained between 500 and 5,000 simulations was 0.14%, while most differences were at least an order of





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number	addressed to.			
			to discuss this matter, and Natural England has provided advice on potential solutions to this. We understand from a discussion with the Applicant on 24th March that these have now been updated for the kittiwake EIA scale and guillemot at the Flamborough and Filey Coast (FFC) SPA based on 5,000 simulations, where previously only 500 simulations had been run. We will respond on the suitability of these updated models following review of the Applicant's Deadline 7 submission.	magnitude smaller (i.e. <0.01%). Furthermore, the outputs for 500 simulations were obtained using the original version of the PVA model (REP2-035) while those in the Deadline 7 submission (REP7-031) used the updated version. Therefore, not only do the additional simulations make no material difference to the counterfactual metrics, but also the PVA model updates have made no difference to these metrics. This corresponds with Natural England's finding, noted in REP5-077:
				'we are not aware that the updates will make a significant difference to the counterfactual metric outputs of models run using the previous/currently available version of the tool. This conclusion is on the basis that the testing undertaken has not thrown up any significant issues with the tool. Therefore, we will use the counterfactual of population size (CPS) and counterfactual of growth rate (CGR) metric outputs from models run by the Applicant using the previous version of the tool as presented in the Deadline 2 updated assessments [REP2-035], provided these are setup and parameterised in the way we have advised (i.e. sufficient simulations etc.) in our Deadline 4 response [REP4-040].'  This response also applies to the other references to PVA made by Natural England in REP7-045, REP7-046, REP7-52, REP7-048, REP7-047 and REP7-053, which reiterate the same comments regarding the version of the PVA used and the number of simulations on which the outputs are based.  Thus, the Applicant considers that the PVA reported in REP2-035, supported by the additional modelling in REP7-031 (as requested by Natural England), means that all the PVA modelling has been conducted
				in accordance with Natural England's advice on set-up and parameters. As such the Applicant is of the understanding that this matter is resolved and
				no further PVA are required.
Q3.2.1.2	The Applicant	<ol> <li>Headroom:         <ol> <li>The Applicant and Ips to state their final position on headroom, and whether agreement is possible within the Examination.</li> <li>The Applicant and IPs to provide any additional information to assist the ExAin making its recommendation to the SoS.</li> </ol> </li> </ol>	1. The Applicant set out its position on Headroom in REP6-021. In summary, the Applicant considers there to be a considerable difference in the collision risk estimates for a number of wind farms due to the reduced risks posed by the built designs compared with the assessed or consented designs. Illustration of this headroom was provided for two wind farms in REP6-021 and the same considerations also apply to other wind farms included in the cumulative and in-combination collision assessments. The Applicant welcomes that Natural England has agreed that this is an issue which requires attention, and that there is likely to be headroom (for the above reasons), although the extent of it is currently uncertain (REP6-049). Therefore the Applicant considers that the principles of precaution in headroom are agreed with Natural England, albeit that the precise details relating to how this affects collision risk modelling is not yet agreed. Whilst it is unlikely that agreement on the extent of available headroom will be reached during the examination, the Applicant's assessment of no AEOI is in no way reliant on available headroom. Available headroom has been presented by the Applicant as just one example of the inherent over precaution in Natural England's requirements for collision risk assessment,	





PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
	addressed to:			
Number				
			which gives further confidence to the reliability of the Applicant's	
			predictions and conclusions that there is no AEoI.	
			2. The Applicant notes the following from 'Natural England's comments on	
			Norfolk Boreas approach to as-built vs consented turbine numbers and	
			headroom in cumulative/in-combination collision assessments' [REP6-049] dated 5 March 2020 and submitted at Deadline 6:	
			Whilst Natural England 'recognise that there is likely to be some	
			headroom for the general reasons set out by the Applicant, the	
			exact extent of any potential headroom is not agreed' (section 1).	
			Therefore, the principle that headroom exists is accepted by	
			Natural England;	
			Natural England agree that 'the use of collision risk estimates'	
			calculated based on WCS may lead to a potential over-estimate of	
			the total cumulative or in-combination assessments in terms of	
			both EIA and HRA' (section 2). Therefore it is accepted by Natural	
			England that headroom may lead to over-estimates in cumulative	
			and in-combination totals;	
			Natural England also make the point in section 2 that 'it is also  assists that the producted improve force (so built') decime are	
			possible that the predicted impacts from 'as-built' designs are greater than those predicted in the ES e.g. the collision mortalities	
			at Lincs OWF increased after application of the correction factor	
			used when calculating the impacts of 'as-built' development.' The	
			Applicant acknowledges this point, however in The Crown Estate	
			wind farm headroom database <sup>1</sup> , using kittiwake as an example,	
			this situation only applies to five wind farms (Greater Gabbard,	
			Kentish Flats, Lincs, Lynn and Inner Dowsing and Ormonde) all of	
			which had low existing collision risks (30 in total for all five), which	
			overall were increased by two, to a total of 32, following	
			adjustment. This contrasts with more than 20 wind farms for	
			which collision risks are reduced, by an average of 37%. Thus,	
			while Natural England's statement is correct, in reality the effect of this is very small and is far outweighed by the reductions for	
			other sites.	
			or section 36 variation has indeed reduced the parameters which	
			are consented within/ under the DCO or under the DCO as	
			changed/varied, in such instances this could be considered "legally	
			secured" (section 4.1). This principle would therefore apply to the	
			Applicant's submission in relation to Triton Knoll. Similarly, the	
			MMO has also agreed the principle that consented (as opposed to	
			assessed) parameters are legally secured.	
			Whilst Natural England state that it remains 'too ambiguous to  definitively state the 'as built' projects are legally secured' (section).	
			definitively state the 'as-built' projects are legally secured' (section 4.2), this does not address the point where the project has been	
			fully built out to the maximum installed capacity consented – as is	
			clearly the case with Hornsea One, to which the Applicant has	
			specifically referred. Neither Natural England or the MMO has	
			submitted any evidence as to why specifically Hornsea One's as-	
			built parameters should not be considered as legally secured.	
			There is no need for a condition that specifies the project becomes	

<sup>&</sup>lt;sup>1</sup> https://www.marinedataexchange.co.uk/ItemDetails.aspx?id=6717





PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			fixed for its lifetime because any changes to the as-built	
			parameters would require a variation to the consent. Phased	
			builds would be irrelevant where the project has been fully built	
			out (as in the case of Hornsea One); and the provision of as-built	
			information goes to the question of the extent of the headroom,	
			not whether there is headroom which is legally secured. In fact,	
			Natural England notes (Section 6) that 'consultation with the MMO	
			may be required to obtain the parameters from the construction	
			<ul> <li>management plan of each project'.</li> <li>Natural England has also misunderstood the Applicant's</li> </ul>	
			comments in relation to 'age of the data'. The Applicant is not	
			questioning the approach to cumulative or in-combination	
			assessment, which relies on the use of data previously agreed with	
			Natural England for individual projects. The Applicant's point is	
			that new environmental information may be required, to support	
			a variation of a consent, if an undertaker sought to change its as-	
			built or WCS parameters beyond those which were originally	
			consented.	
			Natural England state that 'if the Applicant successfully identifies	
			headroom this does not necessarily mean that headroom is the	
			project's to utilise, as there are currently multiple projects ahead	
			of Norfolk Boreas in the Examination process that are not yet	
			consented'. The only projects to which headroom could be	
			applied before Norfolk Boreas are Norfolk Vanguard and Hornsea	
			Project Three. The Applicant has demonstrated that Triton Knoll	
			and Hornsea One alone create sufficient headroom for both	
			Norfolk Vanguard and Norfolk Boreas. In any event, Triton Knoll	
			and Hornsea One are not the only projects where headroom	
			exists.	
			<ul> <li>Natural England appear to accept that the calculation method used for Hornsea One is valid and has demonstrated the available</li> </ul>	
			headroom. Section 6 states, 'in principle Natural England is of	
			the view that the calculation method is valid', and goes on to state,	
			'Whilst the Applicant may have demonstrated in Appendix 4 of	
			REP4-014 that taking the approach developed in Trinder (2017)	
			produces the same predicted collision figure as that obtained	
			through recalculation from the original dataset (using the Band	
			spreadsheets) for HOW01, we note that this has only been	
			demonstrated for one project and given the issues noted above, it	
			is likely that this would be the case for every project. The Applicant	
			has only sought to demonstrate that there is available headroom	
			taking two specific projects into account – Triton Knoll and	
			Hornsea One, and only Triton Knoll relies on the Trinder (2017)	
			approach. Therefore, it appears from Natural England's recent	
			submission (as quoted above) that Natural England accept that	
			both these projects create headroom to the extent demonstrated	
			by the Applicant, i.e. which is sufficient headroom to account for	
			impacts from both Norfolk Vanguard and Norfolk Boreas.	
			Notwithstanding the above, the Applicant's assessment of no AEol     is in no way relient on available bandroom. Available bandroom	
			is in no way reliant on available headroom. Available headroom	
			has been presented by the Applicant as just one example of the	
			inherent over precaution in Natural England's requirements for	
			collision risk assessment, which gives further confidence to the	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number				
			reliability of the Applicant's predictions and conclusions that there is no AEoI.	
Q3.2.1.2	Marine Management Organisation	<ol> <li>Headroom:         <ol> <li>The Applicant and Ips to state their final position on headroom, and whether agreement is possible within the Examination.</li> <li>The Applicant and IPs to provide any additional information to assist the ExAin making its recommendation to the SoS.</li> </ol> </li> </ol>	1. The MMO has sought further advice from our internal legal team and on the basis of advice received is content that the consented figures can be used. The MMO does not agree that as built figures can be used. The MMO supports Natural England's response (REP6-049). The MMO believes that for Hornsea One Offshore Wind Farm, Triton Knoll and Race Bank the DCO/DMLs (and MLA in the case of Race Bank) do not have a specific requirement to provide confirmation of the completion of construction including the confirmation of the final as-built parameters.  2. The MMO believes the decision lies with the SoS and does not have any further information to assist the ExA.	The Applicant notes the MMO's response on this matter and considers that it has already set out a detailed basis for the acceptance of headroom (which Natural England has agreed in principle) and this was summarised in the Applicant's response to this question submitted at Deadline 7, REP7-017).  In the example provided by the Applicant, only the as-built figures for Hornsea One are referred to. The figures referred to in the case of Triton Knoll are the consented figures and the Applicant does not refer to any headroom created by Race Bank in its calculations. The MMO has not explained why, in the particular case of Hornsea One Offshore Wind Farm, which has been built out to its maximum consented capacity of 1218MW, the MMO is unwilling or unable to acknowledge that the as-built figures can be used. Given that the maximum consented capacity has been built and was fully commissioned in January 2020 it is surely not necessary to rely on a notification from the undertaker that construction of this development has been completed, and the MMO will be aware of the final as-built parameters having approved these under the DML conditions. If the undertaker wished to alter the generating station for Hornsea One Offshore Wind Farm in the future, surely a separate consent would be required. In these particular circumstances, it is not clear why the MMO does not agree that the specific as built figures for Hornsea One Offshore Wind Farm can be used, especially given that Natural England appears to have accepted that the Applicant has demonstrated available headroom using these figures (albeit cautioning against applying this more generally to other projects) [REP6-049, see last paragraph of Section 6]. The Applicant is not seeking the MMO's confirmation that all as-built wind farm figures can be used, only that this is the case for Hornsea One Offshore Wind Farm given it has been built and fully commissioned to its maximum consented capacity of 1218MW.
Q3.2.1.2	Marine Management Organisation	<ol> <li>Headroom:         <ol> <li>The Applicant and Ips to state their final position on headroom, and whether agreement is possible within the Examination.</li> <li>The Applicant and IPs to provide any additional information to assist the ExAin making its recommendation to the SoS.</li> </ol> </li> </ol>	Natural England's position on headroom in ornithological cumulative/incombination collision assessments has been set out in our Deadline 6 response [REP6-049] and our Deadline 7 response (Our Ref: NE.NB.D7.06.Ornithology) to the Applicant's headroom position statement submitted in REP6-021.  In summary, Natural England acknowledges the work that the Norfolk Boreas Applicant and their consultants have done to consider potential headroom in the in-combination/cumulative collision risk figures by assessing the 'as built' rather than the worst case scenario (WCS). Natural England recognises that headroom is a significant issue, however it is a highly complex one, and it is important to note that there is not yet an agreed way forward at present. The Applicant's approach has also not been subjected to judicial scrutiny. There are issues/uncertainties associated with the Applicant's proposed approach, and issues with the approach developed by MacArthur Green for The Crown Estate (TCE),and hence Natural England's advice that it is not used. Until these issues are addressed and an industry wide approach is agreed we recommend that the default 'standard' approach is appropriate. We do not disagree that there is likely to be some headroom; however the exact extent of any potential headroom is not agreed.	The Applicant notes Natural England's response on this matter and considers that it has already set out a detailed basis for the acceptance of headroom (which Natural England has agreed in principle) and this was summarised in the Applicant's response to this question submitted at Deadline 7, REP7-017).  With respect to the method developed by Macarthur Green for The Crown Estate, the Applicant notes that in REP6-049 Natural England stated:  Natural England reiterates the comment made during the Hornsea 3 Examination (at Deadline 6 of this Examination4, dated 7 <sup>th</sup> February 2019) that Natural England has not checked the details of the calculation for scaling collisions as set out in Trinder (2017), but in principle Natural England is of the view that the calculation method is valid. However, there are a number of issues which mean that the results obtained will not always be accurate. These include the availability of accurate data on the input parameters used in the original modelling and the actual predicted collision figures eventually arrived at in the course of an Examination, as these may change several times.





	ancing Society Together					
PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments		
Number						
Q3.2.1.3	The Applicant	Turbine Parameters:	We again note that if this is conducted simply on a project-by-project basis this has significant risks of inconsistency of approach across applications. Therefore, we consider that this issue needs to be addressed strategically on behalf of the whole sector, including developing consensus on an approach. However we do recognise that this is not possible in timescale for the Norfolk Boreas examination.  1. It is important to state that whichever turbine model is installed, the	The Applicant considers that Natural England's position on this is therefore that, assuming the input data are agreed to be correct, this method could be used to calculate the revised collision estimates. This being the case, that is how the Applicant has used the method in the examples presented for Hornsea Project One and Triton Knoll [REP6-021].		
		<ol> <li>In [REP6-024] the Applicant bases its CRM assessment on either 158 x 11.55 MW turbines or 124 x 14.7MW turbines. There is no explicit commitment to a minimum turbine size in the DCO [REP5-003], which states "Up to and including 14.6 MW". In theory, the Applicant could implement the maximum number of smaller turbines. The Applicant to confirm whether this would invalidate the CRM.</li> <li>Should the DCO refer to a minimum turbine size of 11.55MW as this is the design basis?</li> <li>Similarly, the Applicant could currently, in theory, implement a lower number of higher output turbines, if technology allows it. The Applicant states 14.7MW option results in a higher collision mortality than the 11.5MW option. Without stipulating a maximum turbine output in the DCO, is there a risk of higher mortality than has been predicted? Can the Applicant provide assurance that this is not the case?</li> <li>Given the rate at which technology advances - is it sensible to apply a given draught height to a given WTG generating capacity? On what assumptions are these draught heights and capacities made?</li> </ol>	maximum number of turbines is 158 and the number of turbines is constrained by the total generating capacity of 1,800MW. The two design options which have been modelled for collision risk, 158 x 11.55MW and 124 x 14.7MW (REP5-059 and REP6-024) represent the highest collision risks for turbines with generating capacities of up to 14.6MW and more than 14.7MW, respectively. In other words, if turbines with a capacity up to 14.6MW are installed, the collision risks will be lower than those for the 11.55MW model (but note that the number of turbines (with a higher capacity than 11.55MW) will be less than 158 as the number of turbines is constrained by the total generating capacity of 1,800MW). And if turbine models with a higher capacity than 14.7MW are installed these will also result in lower collision risks than the 14.7MW turbine (again noting that the number of turbines installed is constrained by the total generating capacity of 1,800MW). The two design options (up to 14.6MW and 14,7MW and higher) have been defined by the minimum draught heights for these two options, 35m from Mean High Water Springs (MHWS), and 30m from MHWS, respectively. Within these two draught heights, the 11.55MW and 14.7MW are the worst case design options, and the 14.7MW option is the worst of the two. Hence the 14.7MW is the overall worst case and the model on which the revised assessment has been based. If the wind farm is built with turbines with a lower capacity than14.6MW then the collision risk modelling in REP5-059 and REP6-024 will not be invalidated.  2. For the purpose of collision risk modelling, the Applicant has modelled turbines of 11.55MW and above. However, it is not necessary to restrict the project to the precise turbine capacities modelled. The purpose of the Rochdale envelope is to assess and secure relevant parameters (of a particular turbine model in this case) which allow flexibility for the final design, provided that those parameters can still be observed. A minimum turbine capacity has never been included as a			





	ty Together			
PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			10), and Condition 8(1)(b) of the Generation DMLs (Schedule 9-10,	
			Part 4). If the maximum export capacity is divided by the	
			maximum number of turbines, it can be seen that in order to reach	
			full export capacity, each individual turbine would need to have	
			an installed capacity which exceeds 11MW (hence the 11.55MW	
			turbine has been modelled). This parameter was changed in the	
			dDCO at Deadline 5 to reflect the change in the turbine modelled.	
			<ul> <li>The spacing of turbines are referred to in the dDCO at Condition</li> </ul>	
			1(1)(g) of the Generation DMLs (Schedule 9-10, Part 4). This	
			requires spacing of at least 800m (increased from the previous	
			spacing of 760m) to reflect the reduction in the maximum number	
			of turbines referred to above. As with the maximum number of	
			turbines, this parameter was changed in the dDCO at Deadline 5	
			to reflect the change in the turbine modelled.	
			The maximum wind turbine generator parameters, on which the	
			collision risk modelling is based, are referred to in the dDCO at	
			Schedule 1, Part 3 Requirement 2(1) and in Condition 1(1) of the	
			Generation DMLs (Schedule 9-10, Part 4). For example, the	
			maximum height and rotor diameter for the turbines.	
			The minimum draught heights referred to in the dDCO at Schedule	
			1, Part 3, Requirement 2(1)(e), and Condition 1(1)(e) of the	
			Generation DMLs (Schedule 9-10). This was introduced as further	
			mitigation at Deadline 5, and specifically avoids referring to a	
			minimum or maximum individual turbine capacity because this is	
			not a parameter which is otherwise secured.	
			Provided that all of these parameters are observed, collision risk will not	
			exceed the worst case modelled in the collision risk assessment. If, for	
			commercial reasons, the Applicant chooses to rely on the flexibility of the	
			Rochdale envelope to construct less than 1,800MW, potentially using	
			turbines of less than 11.55MW (or a mix of turbine sizes) then the	
			Applicant should be entitled to do so, as this would not invalidate the	
			collision risk assessment.	
			Complete Hark dagesament.	
			3. At the scale of a single turbine, models with larger dimensions (e.g. rotor	
			radius) typically have higher collision risks, although because collision risk	
			is also related to RPM (revolutions per minute); which is slower for larger	
			diameter rotors) the increases are usually small. Furthermore, the small	
			increase in risk for each individual turbine, with larger dimensions, is more	
			than offset by the reduction in overall numbers of turbines as they also	
			have higher generating capacity and therefore fewer are required to meet	
			the total generating capacity. Therefore the Applicant is confident based	
			on currently available information that a design based on a smaller number	
			(than 124) of turbines with individual generating capacity of more than	
			14.7MW would not result in higher collision risks. Indeed, in this respect	
			the collision risk modelling in REP5-059 and REP6-024 has been conducted	
			along the same lines as that in previous offshore wind farm impact	
			assessments, which present the collision risks for the worst case design,	
			which results in the highest mortality estimates.	
			4. The draught heights secured in the dDCO (as noted above) relate to	
			ranges of turbine capacity, rather than a specific turbine model (i.e. 35m	
			from MHWS for up to 14.6MW and 30m for the 14.7MW or above, REP5-	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			003). Furthermore, these are the minimum values (i.e. the actual draught heights will be these values or greater). The basis for these draught heights is the maximum operating height of the vessels which are currently available for construction, the maximum height to which the hub and length of rotor blades which can both be installed. The Applicant acknowledges that there may be technology developments which change the turbine models available by the time construction commences and it is likely that vessel capacity will increase to meet demands associated with larger turbines. However, it is also necessary for the Applicant to commit to certain design parameters in order to reach agreement on potential impact magnitudes on which a consent decision can be based. Hence, the Applicant has committed in the DCO to these worst case minimum draught heights and the wind farm will be constructed within these defined limits	
Q3.2.1.3	Marine Management Organisation	<ol> <li>In [REP6-024] the Applicant bases its CRM assessment on either 158 x 11.55 MW turbines or 124 x 14.7MW turbines. There is no explicit commitment to a minimum turbine size in the DCO [REP5-003], which states "Up to and including 14.6 MW". In theory, the Applicant could implement the maximum number of smaller turbines. The Applicant to confirm whether this would invalidate the CRM.</li> <li>Should the DCO refer to a minimum turbine size of 11.55MW as this is the design basis?</li> <li>Similarly, the Applicant could currently, in theory, implement a lower number of higher output turbines, if technology allows it. The Applicant states 14.7MW option results in a higher collision mortality than the 11.5MW option. Without stipulating a maximum turbine output in the DCO, is there a risk of higher mortality than has been predicted? Can the Applicant provide assurance that this is not the case?</li> <li>Given the rate at which technology advances - is it sensible to apply a given draught height to a given WTG generating capacity? On what assumptions are these draught heights and capacities made?</li> </ol>	2. The MMO will discuss this point further with the applicant and Natural England and comment at Deadline 8.  3. The MMO defers to Natural England in relation to mortality rates.	With respect to point no. 2, the Applicant notes the MMO's response to the question of including the turbine size in the DCO and welcomes the offer for further discussions. However, It should also be noted that the Applicant presented the basis for why there is no requirement for including the turbine model in the DCO in the response to this question submitted at Deadline 7 [REP7-017].
Q3.2.1.3	Natural England	<ol> <li>Turbine Parameters:         <ol> <li>In [REP6-024] the Applicant bases its CRM assessment on either 158 x 11.55 MW turbines or 124 x 14.7MW turbines. There is no explicit commitment to a minimum turbine size in the DCO [REP5-003], which states "Up to and including 14.6 MW". In theory, the Applicant could implement the maximum number of smaller turbines. The Applicant to confirm whether this would invalidate the CRM.</li> <li>Should the DCO refer to a minimum turbine size of 11.55MW as this is the design basis?</li> </ol> </li> <li>Similarly, the Applicant could currently, in theory, implement a lower number of higher output turbines, if technology allows it. The Applicant states 14.7MW option results in a higher collision mortality than the 11.5MW option. Without stipulating a maximum turbine output in the DCO, is there a risk of higher mortality than has been</li> </ol>	As noted in our Deadline 7 response to the Applicant's updated collision risk modelling (CRM) assessment for the project alone [REP5-059], as Norfolk Boreas are in REP5-059 committing to removing the 9MW, 10MW and 11MW options from their design envelope, Natural England again suggests that the DCO needs to clearly indicate that turbines smaller than 11.55MW turbines cannot be installed. Therefore, as per our comments on the updated DCO at deadline 7, the minimum turbine size should also be captured within the DCO.  Natural England notes that the 14.7MW option results in a higher collision mortality prediction than the 11.55MW turbine option largely due to the larger turbines having a lower minimum draught height. Whilst in theory, it is possible that the Applicant could implement a lower number of larger turbines than the revised WCS in REP5-059 of 124 14.7MW if technology allows. If the minimum clearance of the blades of such turbines above the water is maintained (i.e. the 30m minimum clearance stated by the Applicant in REP5-059), Natural England considers it likely that fewer larger turbines would be likely to have a smaller environmental impact than the	The Applicant notes Natural England's response on the question of including the turbine size in the DCO. However, the Applicant presented the basis for why there is no requirement for including the turbine model in the DCO in the response to this question submitted at Deadline 7 [REP7-017].  Natural England notes that if the draught height is less than 30m then the collisions could be higher than those submitted in REP5-059. While this may, under some circumstances be correct, this situation could not occur since the minimum draught height has been secured in the DCO (in exactly the same way that the previous minimum of 22m would have been if this draught height had been maintained). Thus the worst case collision mortalities, for 124 turbines rated at 14.7MW, as presented in REP5-059 will not be exceeded if a smaller number (which would also be a requirement since the total wind farm capacity must remain within the 1,800MW limit, specified in the DCO) of larger capacity turbines are installed. The same would also apply if a smaller capacity turbine (i.e.





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		<ul> <li>predicted? Can the Applicant provide assurance that this is not the case?</li> <li>4. Given the rate at which technology advances - is it sensible to apply a given draught height to a given WTG generating capacity? On what assumptions are these draught heights and capacities made?</li> </ul>	WCS smaller turbines. However, if turbines larger than 14.7MW were to be installed and were to have a lower minimum clearance of blades above the water than 30m, then there would be the potential for a higher collision mortality prediction.	<14.7MW) is used, since in this case no more than 158 turbines could be installed (with the actual number again constrained by the total output of 1,800MW) and this would generate lower collisions than calculated for 124 x 14.7MW as explained in REP5-059. Furthermore it should be noted that if a turbine with a lower capacity than 11.55MW is used then the total wind farm output would be reduced, since the maximum permitted number of turbines will remain 158. Thus, between the constraints on draught height, the maximum number of turbines and the total wind farm generating capacity there is no risk of obtaining higher collision risk than those presented in REP5-059 and on which the wind farm application is currently based.

# **3 Compulsory Acquisition**

# 3.0 Compulsory Acquisition

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.3.0.1	The Applicant	Summarise the case for Compulsory Acquisition and Temporary Possession (referring to relevant references in the Examination Library) indicating how the following matters are addressed:  a. whether the purposes for which the compulsory acquisition powers are sought comply with statutory and policy tests under s122 of PA 2008 and DCLG Guidancerelated to procedures for the compulsory acquisition of land;  b. how Article 1 and Article 8 of the First Protocol to the European Convention on Human Rights has been considered; and  c. Having regard to section 122(3) of the PA 2008, whether there is a compelling case in the public interest for the compulsory acquisition in relation to:  i. The need in the public interest for the project to be carried out.  ii. The private loss to those affected by compulsory acquisition.	a. The Applicant considers the inclusion of powers of compulsory acquisition in the dDCO for the purposes of the Project meets the conditions of section 122 of the PA 2008 and the Guidance (Statement of Reasons (SoR), paragraph 11.1 [REP5-006]).  The interests sought are no more than are reasonably required. Other land required to facilitate or land incidental to the Project is no more than is reasonably necessary for that purpose and is proportionate (SoR, paragraph 11.2).  The Applicant has a clear need for the powers of compulsory acquisition it seeks and has a clear purpose in its proposed acquisition powers. The Works Plan (Onshore) (Document 2.4) [REP1-004 – REP1-007] and description of the authorised development in the dDCO demonstrate that the Applicant has a clear idea of what the relevant Order lands are required for. All of the Order land is required for the Project to be constructed and used for the purpose of supporting the conveyance of electricity (SoR, paragraph 6.6).  The Applicant has been in discussions with the landowners with a view to agreeing terms for the sale of the necessary rights in land and is hopeful of concluding Heads of Terms (HoT) with all landowners prior to the close of examination. There are currently agreed HoT with 83 out of 100 landowners.  The need for the Project and the support for such projects in the relevant NPSs demonstrate a compelling case in the public interest for the required interests to be acquired compulsorily (\$122(3) PA 2008) (SoR, paragraph 11.3).  The Applicant considers the project to be (i) in accordance with established and emerging national policy in relation to NSIPs contained in NPS EN-1, NPS EN-3 and NPS EN-5, (ii) required to	





Enhancing Society	logether			
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			meet a pressing national need for electricity generating capacity and (iii) necessary and proportionate to the extent that interference with private rights is required (SoR, paragraph 7.34).	
			Additionally, the Applicant has a well worked up scheme, and funding that is sufficient to take the Project forward (SoR, paragraph 7.33).	
			All reasonable alternatives to compulsory acquisition have been explored. Given the national and local need for the Project and the support for it found in policy, the land identified by the Applicant for the Project is the only land available for those purposes (SoR, paragraph 11.4).	
			The Applicant has sought, and continues to seek a negotiated solution to each of the identified required interests. In each case the Applicant has chosen to secure land, rights or temporary possession in a way that minimises disruption to the relevant owners (SoR, paragraph 7.22).	
			The selection of the landfall, onshore cable corridor and substation location is set out in detail in the Environmental Statement (document reference 6.1), in particular in Chapter 4 [APP-217]. The land scheduled in the Book of Reference is necessary and appropriate; there are no other suitable alternatives (SoR, paragraph 7.23).	
			Where land is in unknown ownership and so scheduled in the Book of Reference as such, the Applicant has not been able to identify the relevant holder of that interest. All identified owners of interests have been approached and where possible agreement has been reached. Negotiations will continue, but the Applicant considers compulsory acquisition powers can be justified to ensure that the Project can be developed within a reasonably commercial timescale (SoR, paragraph 7.24).	
			The proposed interference with the rights of those with an interest in the Order land is for a legitimate purpose and is necessary and proportionate to that purpose (SoR, paragraph 11.5).	
			The Applicant has set out clear and specific proposals of how the Order land will be used (SoR, paragraph 11.6).	
			The Statement of Reasons [REP5-006] and Book of Reference [REP1-010] set out clearly how the Order land will be used.	
			The requisite funds are available to meet any costs of land acquisition or amount of compensation payable as a result of the use of powers of compulsory acquisition (SoR, paragraph 11.7).	
			The Funding Statement [APP-025] submitted by the Applicant clearly sets out the availability of funds required to meet any costs of land acquisition, or compensation payable as a result of the utilisation of compulsory acquisition powers.	





Enhancing Society	-			
PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question				
Number				
			The Applicant will have the ability to procure the financial	
			resources necessary to fund the works, subject to final board	
			authority. The Applicant is a wholly owned subsidiary of	
			Vattenfall Wind Power Ltd who, together with Vattenfall AB	
			(the ultimate parent company), have substantial net assets as	
			well as positive track records in the field of renewable energy	
			development. The Applicant and Vattenfall AB will therefore	
			be able to procure the required funding for the Project,	
			including all likely compensation liabilities resulting from the	
			exercise of compulsory acquisition powers (Funding	
			Statement, paragraph 3.9).	
			1 - 1 A 1:	
			b. The Applicant has given consideration to human rights	
			issues both before and after the Application was submitted.	
			Paragraph 8 of the SoR sets out that consideration.	
			The purpose of powers of compulsory acquisition to be	
			included in the Order justifies interfering with the human	
			rights of those persons with an interest in the land proposed to	
			be acquired (SoR, paragraph 11.8).	
			The Applicant has weighed the potential infringement of rights	
			contained in the European Convention on Human Rights (in	
			consequence of the inclusion of compulsory powers within the	
			Order) with the potential public benefits if the Order is made	
			(SoR, paragraph 8.68).	
			The Applicant considers that there would be significant public	
			benefit arising from the grant of development consent. That	
			benefit is only likely to be realised if the Order includes powers	
			of compulsory acquisition. The significant public benefits on	
			balance outweigh the effects upon persons who own property	
			and rights within the Order land (SoR, paragraph 6.68).	
			These offseted by communicating securities	
			Those affected by compulsory acquisition may claim	
			compensation in accordance with the Statutory Compensation Code. Through its ultimate parent company, the Applicant has	
			the resources to provide such compensation (SoR, 8.58).	
			Should the Order be made, a person aggrieved may also	
			challenge the Order in the High Court if they consider that the	
			grounds for doing so are made out pursuant to section 118 of	
			the 2008 Act. Affected persons have the right to apply to the	
			Upper Tribunal (Lands Chamber), if compensation is disputed	
			(SoR, 8.61).	
			The requirements of compensation being payable for the	
			acquisition of any interest are met. Therefore Article 1 of	
			Protocol 1 is not contravened (SoR, 8.62).	
			Trotocor 1 is not contraveneu (son, o.uz).	
			In considering article 8 of Protocol 1, the proposed	
			interference with the rights of those with an interest in the	
			Order land is for a legitimate purpose and is necessary and	
			proportionate to that purpose (SoR, paragraph 11.5). The	
			Applicant has weighed the potential infringement of	
			Convention Rights in consequence of the inclusion of	
			compulsory powers within the dDCO with the potential public	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			benefits if the dDCO is made. The Applicant considers that there would be significant public benefit from the grant of development consent, and that benefit is only likely to be realised if the dDCO includes powers of compulsory acquisition.	
			c. The Applicant considers the compelling case and proportionate tests in section 7 of the SoR (sections 7.30-7.34). The need for the Project and the support for such projects in the relevant NPS' demonstrate a compelling case in the public interest for the required interests to be acquired compulsorily (s122(3) Planning Act 2008) (SoR, paragraph 11.3).	
			As outlined above, the Applicant considers the project to be (i) in accordance with established and emerging national policy in relation to NSIPs contained in NPS EN-1, NPS EN-3 and NPS EN-5, (ii) required to meet a pressing national need for electricity generating capacity and (iii) necessary and proportionate to the extent that interference with private rights is required (SoR, 7.34).	
Q3.3.0.2	The Applicant	Provide a detailed, track change update of the Compulsory Acquisition Objections Schedule [REP6-023] in relation to the status of negotiations.	An updated tracked changed version of the Compulsory Acquisition Objections Schedule [REP6-023] has been submitted by the Applicant.	
			This includes updates to landowner negotiations where applicable and the addition to the Schedule of those parties requested in the questions below.	
Q3.3.0.2	National Farmers Union	Provide a detailed, track change update of the Compulsory Acquisition Objections Schedule [REP6-023] in relation to the status of negotiations.	The Compulsory Acquisition Objections Schedule (COAS).  Current negotiations in relation to the request to amend provisions from 2 easements to 4 easements relate to landowners represented by NFU and LIG. NFU/LIG are seeking an obligation that a managing agent is appointed so that Landowners only have one point of contact rather than 4 which would be logistically challenging.  We would expect to see C and P Allhusen (Bradenham Hall Farms) included in the Objections Schedule as Heads of Terms for the converter station are still to be agreed. The matters still	The Applicant has made clear that during the construction phase of the project, the Applicant will be the sole point of contact and will deal with any compensation claims, as such there is no need for any managing agent.  In respect of the operation and maintenance phase, advice sought from OFTO industry experts is that OFTOs could not accept the appointment of a sole managing agent as their rights cannot be fettered. OFTOs are regulated by OFGEM and must comply with various requirements and statutory duties, including those under the Electricity Act 1989. In any event,
			under discussion are the layout, landscape mitigation and design of buildings, the colour and the finish. The current landscaping proposal does not provide a quick and effective screen to the estate. Discussions are ongoing how this can be improved. Information has also been requested on the internal and external noise of the converter station and the associated electrical equipment and how this will mitigated. Visuals of the constructed site have been requested which take into consideration the topography of the land. There is no landscaping proposed to the north of the converter station which is necessary to protect and screen the estate. Under	once the cables are in place there would be extremely minimal contact (if any) with landowners as there would be limited circumstances in which the OFTO would need to access their cable (for example, in the event of cable failure).  The Applicant remains in ongoing discussions with Mr Allhusen over the land and rights required to construct the onshore converter station. Mr Allhusen has signed HoTs for an option agreement for the cable rights required across his land.  The last meeting with Mr Allhusen took place on the 16th March 2020 and the Applicant continues to discuss matters of concern for the landowner including the location and form of





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
			Scenario 2 it is requested that the building is sited further west to provide sufficient space for landscaping without having to take another field.	converter station, the proposed screening and planting mitigation, the interaction with existing drainage infrastructure, soil composition, noise and light levels and the proposed operating regime during the construction process. The Applicant will include Mr Allhusen in the next version of the COAS if required by the Examining Authority.
Q3.3.0.3	The Applicant	Explain in detail the approach taken to identify Category 3 Parties [REP5-007] including the steps taken to keep this information up to date during the course of the Examination.	As set out in paragraph 8.59 of the Statement of Reasons [REP5-007], the Applicant has consulted persons set out in the categories contained in section 44 of the 2008 Act, which include owners of the Order land and those who may be able to make claims either under section 10 of the Compulsory Purchase Act 1965 or Part 1 of the Land Compensation Act 1973. No persons were identified in the latter category.  As set out in the Consultation Report [APP – 027], paragraph 505, based on the environmental information available at the point of the Applicant's sister project's (Norfolk Vanguard – Sharing the same cable corridor and with the onshore project substations being located on land adjacent to one another) statutory consultation (in October 2017), and the further review of the position of the Order limits of the Applicant's application, the Applicant concluded that there would be no Part 1 claims substantiated. Therefore, the Applicant did not include any parties in the scope for land referencing in this regard and in the formal section 42/44 consultation.  The Applicant has not identified any persons who may potentially be eligible to substantiate a Part 1 claim under Category 3.  In relation to potential claimants under section 10 of the Compulsory Purchase Act 1965, the Applicant has conducted diligent enquiries to identify those persons who may be able to satisfy a claim for compensation under this section.  As set out in the Consultation Report [APP – 027], the Applicant issued multiple rounds of Request for Information Forms (RFIs) to interested parties and landowners identified from the land registry, requesting information relating to other parties who may have private rights across the Order land. All land registry documentation was interrogated and rights identified and documented in the Book of Reference (BoR) [REP1-011] Part 2.  Prior to and during the course of the examination, the Applicant has continued to liaise with affected landowners in regards to the presence of third party rights across the in	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
			they arise, are identified and included in the final version of the Book of Reference.	
Q3.3.0.4	The Applicant	The NFU [REP5-074] indicates that landowner Dillington is identified on the Compulsory Acquisition Objections Schedule [REP6-023] at Row 32 and that discussions are ongoing over access matters. The Applicant states at Deadline 6 [REP6-014] that it considers a way forward has been agreed in relation to access and that Heads of Terms have been signed.  a. Confirm whether Dillington is included in the Schedule and if not, please add a new row with all relevant details.  b. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.  c. Confirm whether or not agreement has been reached in relation to outstanding matters and if not, what the matters are that are preventing agreement	Applicant will also address this matter directly with the NFU along with the landowner's agent and solicitor through Option Agreement negotiation.	
Q3.3.0.4	National Farmers Union	The NFU [REP5-074] indicates that landowner Dillington is identified on the Compulsory Acquisition Objections Schedule [REP6-023] at Row 32 and that discussions are ongoing over access matters. The Applicant states at Deadline 6 [REP6-014] that it considers a way forward has been agreed in relation to access and that Heads of Terms have been signed.  a. Confirm whether Dillington is included in the Schedule and if not, please add a new row with all relevant details.  b. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.  c. Confirm whether or not agreement has been reached in relation to outstanding matters and if not, what the matters are that are preventing agreement	How will Vattenfall manage the situation where there is an irrigation main located within the proposed route of the cable? What provision will be made for access to the main and hydrants?  Can Vattenfall provide updates on the timings of the ecology surveys which incorporate land where there are pigs? How will Vattenfall organise for their contractors to cross the working strip during construction at specific points?	An irrigation main would be crossed similar to any other form of existing underground utility as described in Section 5.7.2.3.2 of Chapter 5 Project Description [APP-218].  The Applicant has agreed with the landowner that access will not be taken until after the 1st of June 2020. The landowner has confirmed that the pigs are no longer on site. The Applicant does not understand what the access issues are in this location. The Applicant has asked the NFU directly for further information.  The Applicant assumes that the NFU response meant to refer to the landowner's contractors and not the Applicant's contractors. The OCoCP [REP5-010] notes under para 124 and 125 that 'Temporary means of access will be provided to severed fields for vehicles and machinery in order to ensure access is maintained wherever practicable' and 'Wherever practicable, appropriate planning and timing of works will be agreed with landowners and occupiers, subject to individual agreements, to reduce conflicts'. Furthermore, the ALO will ensure that 'landowners and occupiers are consulted in respect of requirements relating to field entrances and accesses across the construction strip and land-locked or severed land parcels'.
Q3.3.0.5	The Applicant	The NFU [REP5-074] indicates that landowner James Keith is not identified on the Compulsory Acquisition Objections Schedule [REP6-023] and that discussions are ongoing over access matters. The Applicant states at Deadline 6 [REP6-014] that it considers a way forward has been agreed in relation to access and that Heads of Terms have been signed.  a. Add James Keith to the Schedule.  b. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.	<ul> <li>a. James Keith has been added to the updated Compulsory Acquisition Objections Schedule submitted at deadline7.</li> <li>b. Accesses under discussion are AC141, AC142 and AC143. The reason for the previous discussions is that Mr Keith would prefer alterative accesses are used from the south of the cable corridor.</li> <li>c. Mr Keith has signed HoTs for an Option Agreement. To minimise the extent of access use for cable pulling activities, the Applicant has undertaken with the landowner, through the private agreement and discussions, to not utilise the middle of the three northern accesses (AC142). Also, where possible, the Applicant has</li> </ul>	Services lating purceips.





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
03.205	NEW/ICA fforted Domina	c. Confirm whether or not agreement has been reached in relation to outstanding matters and if not, what the matters are that are preventing agreement.	undertaken to use the preferred accesses from the south through discussions with the Landowner for operational access purposes. Where the Applicant has agreed not to use certain accesses and utilise alternatives, these will remain in the DCO in case negotiations break down or the landowner defaults on the agreements.	
Q3.3.0.5	NFU/LIG Affected Persons	The NFU [REPS-074] indicates that landowner James Keith is not identified on the Compulsory Acquisition Objections Schedule [REP6-023] and that discussions are ongoing over access matters. The Applicant states at Deadline 6 [REP6-014] that it considers a way forward has been agreed in relation to access and that Heads of Terms have been signed.  a. Add James Keith to the Schedule. b. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason. c. Confirm whether or not agreement has been reached in relation to outstanding matters and if not, what the matters are that are preventing agreement.	<ul> <li>a) Add James Keith to the Schedule. Yes</li> <li>b) By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.</li> <li>It has been agreed that access route: AC142 will no longer be used.</li> <li>AC140: No comment</li> <li>AC141: Why does there have to be two access points either side of a hedge/field boundary? Why is there not a single access down one side of the hedge?</li> <li>AC143: There is concern about the size of vehicles and number of movements required to use this.</li> <li>c) Confirm whether or not agreement has been reached in relation to outstanding matters and if not, what the matters are that are preventing agreement.</li> <li>How is Vattenfall going to manage the works and compensation for the lowland shooting activities?</li> <li>Please can Vattenfall provide details of the proposed construction methods, and whether matting will be used to mitigate damage?</li> <li>Please can Vattenfall confirm the appointed drainage contractor?</li> <li>Please can Vattenfall confirm the appointed soil engineer?</li> <li>Please can Vattenfall confirm how they are going to protect the access tracks taken for lateral access? Especially when these access tracks are deemed unsuitable for HGV access.</li> </ul>	<ul> <li>a) The Applicant confirms James Keith has been added to the Compulsory Acquisition Objections Schedule (Version 3) submitted at deadline 7 [REP7-022].</li> <li>b) AC141 – Access is required either side of the hedge to allow access to the east or west along the cable route whilst avoiding the need to remove the hedge that sits between the two accesses stemming south from AC141.</li> <li>Where necessary, the AC143 will be temporarily improved to support HGV access. This may include the use of protective matting, temporary metal road or permeable gravel aggregate dependant on the ground conditions and vehicle requirements.</li> <li>c) In response to the questions raised: <ul> <li>Any impact on shooting will be a compensatable matter dealt with as set out in the terms of the Option Agreement. In the absence of an agreement, matters will be settled under the Compensation Code.</li> <li>Where necessary, access tracks will be temporarily improved to support HGV access. This may include the use of protective matting, temporary metal road or permeable gravel aggregate dependant on the ground conditions and vehicle requirements.</li> <li>Both the drainage contractor and the soil engineer will be appointed post consent. These roles are secured in the OCoCP, 'The services of a suitably qualified drainage consultant will be employed by the Applicant to act as a drainage expert during the detailed design process' and 'A soil management plan would be produced by a competent soil science contractor and agreed with the relevant regulator, in advance of the works'.</li> <li>As set out above, where necessary, access tracks will be temporarily improved to support HGV access. This may include the use of protective matting, temporary metal road or permeable gravel aggregate dependant on the ground conditions and vehicle requirements.</li> </ul> </li> </ul>
Q3.3.0.6	The Applicant	The NFU [REP5-074] indicates that landowner Bawdeswell is not identified on the Compulsory Acquisition Objections Schedule [REP6-023] and that discussions are ongoing over access matters. The Applicant states at Deadline 6 [REP6-014] that it considers a way	a. The Applicant has now added the Bawdeswell Estate to the Compulsory Acquisition Objections Schedule. There are two rows that have been added as the Bawdeswell Estate ownership is split into two sets of trustees.	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
		forward has been agreed in relation to access but Heads of Terms have not been signed.  a. Add Bawdeswell to the Schedule.  b. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.  c. Are Heads of Terms likely to be signed before the end of the Examination and what steps are being taken to achieve this?	that the Estate considers that a simpler access is possible from the north from Jordan Green off Jordan Lane.	
Q3.3.0.6	National Farmers Union	The NFU [REP5-074] indicates that landowner Bawdeswell is not identified on the Compulsory Acquisition Objections Schedule [REP6-023] and that discussions are ongoing over access matters. The Applicant states at Deadline 6 [REP6-014] that it considers a way forward has been agreed in relation to access but Heads of Terms have not been signed.  a. Add Bawdeswell to the Schedule. b. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason. c. Are Heads of Terms likely to be signed before the end of the Examination and what steps are being taken to achieve this?	a) Yes needs to be added to schedule b) By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason. An agreement has been reached for the access routes. c) Are Heads of Terms likely to be signed before the end of the Examination and what steps are being taken to achieve this? Yes we believe that Heads of Terms will be signed.	As set out by the Applicant in its Responses to the Examining Authority's Third Round of Written Questions at Deadline 7 [REP7-017], two sets of HoTs have been signed by the trustees for the Bawdeswell Estate. Discussions are now progressing on the Option Agreements with each trustee.
Q3.3.0.7	The Applicant	The NFU [REP5-074] indicates that discussions are ongoing over access matters with landowner Padulli (Row 27 of the Compulsory Acquisition Objections Schedule [REP6-023]. The Applicant states at Deadline 6 [REP6-014] that Heads of Terms for an option agreement have been agreed but not yet signed and that it is anticipated that these will be signed in the near future, following which discussions will commence to negotiate the form of Option and Deed documentation.  a. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.  b. Are Heads of Terms now signed and if not, what are the factors that are preventing this?	<ul> <li>a. The access under discussion is AC50. The Landowner would prefer access was taken from the north at the T-Junction seen on Sheet 11, north of AC50. The Applicant is not able to incorporate this preferred access due to a number of reasons: <ul> <li>Reduced visibility for both users of the existing Brick Kiln Lane/ Felmingham Road junction and for a new construction access.</li> <li>Increased likelihood of confusion related to traffic movements at the Brick Kiln Lane/ Felmingham Road junction and interaction with the construction access.</li> <li>Typical construction vehicles using an alternative field access would not be able to carry out the detailed 180 degree manoeuvre approaching from the south on Felmingham Road into the alternative access.</li> <li>The existing proposed access AC50 provides benefits (including visibility and safety) at its current location compared to the access to the north.</li> <li>However in recent discussions, the Applicant has agreed to not use AC50 and utilise access directly from the highway at the easement corridor crossing point, directly south of AC50, at AC49. This will be reflected in the final agreed form Option</li> </ul> </li> </ul>	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
			Agreement between the parties; however, in the meantime, the Applicant requires the power to keep AC50 within the dDCO.  b. HoTs are still not signed with this party and the Applicant is in discussions with the land agent to conclude matters swiftly. The Applicant believes there are no further outstanding points.	
Q3.3.0.7	National Farmers Union	The NFU [REP5-074] indicates that discussions are ongoing over access matters with landowner Padulli (Row 27 of the Compulsory Acquisition Objections Schedule [REP6-023]. The Applicant states at Deadline 6 [REP6-014] that Heads of Terms for an option agreement have been agreed but not yet signed and that it is anticipated that these will be signed in the near future, following which discussions will commence to negotiate the form of Option and Deed documentation.  a. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.  b. Are Heads of Terms now signed and if not, what are the factors that are preventing this?	Padulli:  a) Relates to AC49 and AC50. AC49 is agreed. AC50 is not	Discussions are ongoing with the landowner and his representatives in relation to the accesses. The Applicant believes that matters are close to agreement and should be concluded by the close of examination.
Q3.3.0.8	The Applicant	The NFU [REP5-074] indicates that discussions are ongoing over access matters with landowner Siely (Row 14 of the Compulsory Acquisition Objections Schedule [REP6-023]. The Applicant states at Deadline 6 [REP6-014] that Heads of Terms have been agreed and signed.  a. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.  b. Confirm the position.	<ul> <li>a. The access under discussion is AC1. The Landowner and land agent were asking why the farm track heading east from this access was not utilised at this location, instead of the field as shown on the plans. The Applicant has since explained the reasoning, being to avoid conflicting access with other users and to ensure a suitable width is possible at all times along the access. The existing track is too narrow in places.</li> <li>b. HoTs for an Option Agreement have been signed with the Applicant and the Applicant understands that the land agent and Landowner are satisfied with the response provided.</li> </ul>	
Q3.3.0.8	National Farmers Union	The NFU [REP5-074] indicates that discussions are ongoing over access matters with landowner Siely (Row 14 of the Compulsory Acquisition Objections Schedule [REP6-023]. The Applicant states at Deadline 6 [REP6-014] that Heads of Terms have been agreed and signed.  a. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.  b. Confirm the position.	Siely:  a) Relates to AC1.  b) Discussions are ongoing in respect of protecting third party	As set out by the Applicant in the Responses to the Examining Authority's Third Round of Written Questions at Deadline 7 [REP7-017], the access route in this location was located away from the track utilised by other third parties, so far as possible, in order to mitigate the impact on other third party users.
Q3.3.0.9	The Applicant	The NFU [REP5-074] indicates that discussions are ongoing over access matters with landowner Mutimer (Row 38 of the Compulsory Acquisition Objections Schedule [REP6-023]. The Applicant states at Deadline 6 [REP6-014] that agreement has been reached and Heads of Terms signed.  a. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.  b. Confirm the position.	<ul> <li>a. Access AC53 is under discussion. This is due to the landowner preferring a more direct access from the highway rather than the current route as shown around the field boundaries.</li> <li>b. Whilst the Applicant needs to retain AC53 in the dDCO, the Applicant has agreed to use an alternative access directly from the highway into the easement corridor where reasonably possible. This will be reflected in the final form Option Agreement</li> </ul>	





	o Together	Outsillers.	Internated Booking Booking to Deadling To	Annii - mile Commente
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.3.0.9	National Farmers Union	The NFU [REP5-074] indicates that discussions are ongoing over access matters with landowner Mutimer (Row 38 of the Compulsory Acquisition Objections Schedule [REP6-023]. The Applicant states at Deadline 6 [REP6-014] that agreement has been reached and Heads of Terms signed.  a. By reference to the Access to Works plans [APP-011] confirm which access is the subject of ongoing discussion and for what reason.  b. Confirm the position.	Mutimer: a) Relates to access AC53. The route can be accessed directly from the road, AC54, making the additional route unnecessary. b) Discussions are ongoing.	Discussions are ongoing as set out in the Applicant's Responses to the Examining Authority's Third Round of Written Questions at Deadline 7 [REP7-017]. Informal agreement has been provided to utilise the alternative access as requested by the landowner. HoTs are agreed with the landowner.
Q3.3.0.10	The Applicant	The Applicant states at Deadline 5 [REP5-045] that Carrick (Row 34 of the Compulsory Acquisition Objections Schedule [REP6-023] that Heads of Terms for an option agreement have been issued by the Applicant and negotiations are ongoing and that the Applicant considers that it will be possible to reach agreement in due course.  a. By reference to the Access to Works plans [APP-011] confirm what access is the subject of ongoing discussion.  b. What are the detailed arrangements that would enable the land subject to temporary possession for access purposes, where this land is used by others for access purposes, to be used by others during the period of temporary possession? How would this be secured?  c. Are Heads of Terms likely to be signed before the end of the Examination, what are the matters of dispute and what steps are being taken to achieve this?	<ul> <li>a. The access under discussion is AC131.</li> <li>b. All accesses identified on the Land Plans and Access to Works Plans are for permanent rights of access during operation. A subset of the accesses will be potentially required for specific aspects of construction also and these are fully detailed in Table 2.1 of the Outline Access Management Plan (OAMP) [APP-701].</li> <li>All accesses are occupied and utilised by Landowners and other third parties. Where possible the Applicant will minimise the impact on other users of the accesses when travelling from the highway to the works.</li> <li>The Outline Traffic Management Plan (OTMP), secured under Requirement 21 of the dDCO and subject to approval by the relevant planning authority in consultation with the highway authority, includes a range of delivery management measures including coordinating HGV delivery demand with local businesses.</li> <li>In relation to field access across the cable corridor, the Outline Code of Construction Practice (OCoCP) [REP5-011] includes the provision that temporary means of access will be provided to severed fields for vehicles and machinery in order to ensure access is maintained wherever practicable and further that wherever practicable, appropriate planning and timing of works will be agreed with landowners and occupiers, subject to individual agreements, to reduce conflicts.</li> <li>In addition, the role of the Agricultural Liaison Officer (ALO) will include ensuring that landowners and occupiers are consulted in respect of requirements relating to field entrances, accesses and access across the construction strip to land-locked or severed land parcels. The OCoCP is secured under dDCO Requirement 20.</li> <li>c. The Applicant is hopeful that HoTs can be signed before the close of Examination and is keen to hold</li> </ul>	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number				
			further discussions with the affected landowner and occupier.  The landowner is concerned with the impact the use of the access may have on the wedding business which operates from the premises close to the access track. The Applicant has reviewed a potential alternative access proposed by the Landowners, however the Applicant has responded to state that the alternative cannot be used for the following reasons:  The existing access contained in the dDCO is shorter, limiting the time and materials required to establish the temporary access improvements if required. The longer alternative route proposed by the Landowner will require more time and materials to be put in place suitable for the cable jointing works and subsequently reinstatement which will result in additional traffic to the location and for a longer period of time  The existing access is direct to the cable route with the exception of one 90 degree bend. The alternative access introduces at least four 90 degree bends which will likely require additional land take and materials to allow for vehicle turning.  The existing access provides a safer existing entry/exit point onto the public highway through an existing bellmouth suitable for construction traffic. The alternative access would likely require potential improvements to the junction with the public highway to make it safe which may include a bellmouth and or tree removal for improved visibility. Again, these works would also extend the time required to establish and reinstatement the access.  The existing access avoids interaction with a non-designated historic monument (ref 1273) which the alternative access would impact as part of any track improvements.  The existing access is further away from Woodgate Meadow County Wildlife Site (CWS) whilst the alternative access would border alongside the western and southern boundary of the CWS. The proximity to the CWS has the potential to impact ecologically sensitive features, including, but not limited to, bat roosts and 3 ponds which have not been	
			far as possible, which, the Applicant would assume, would be the busiest time for both the wedding venue	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
			<ul> <li>and campsite. These can be captured in the private agreements.</li> <li>Access routes will be constructed according to site conditions to minimise damage by the use of trackway, bog mats etc.</li> <li>The actual joint bay worksites will be at least 450 metres from the venues, so impact is limited to traffic movements only.</li> </ul>	
Q3.3.0.10	National Farmers Union	The Applicant states at Deadline 5 [REP5-045] that Carrick (Row 34 of the Compulsory Acquisition Objections Schedule [REP6-023] that Heads of Terms for an option agreement have been issued by the Applicant and negotiations are ongoing and that the Applicant considers that it will be possible to reach agreement in due course.  d. By reference to the Access to Works plans [APP-011] confirm what access is the subject of ongoing discussion.  e. What are the detailed arrangements that would enable the land subject to temporary possession for access purposes, where this land is used by others for access purposes, to be used by others during the period of temporary possession? How would this be secured?  Are Heads of Terms likely to be signed before the end of the Examination, what are the matters of dispute and what steps are being taken to achieve this?	Carrick: a) Relates to AC131 b) Still in discussions of how to mitigate impact on third parties including the wedding venue and camping site. c) Discussions are on -going and it is hoped that Heads of Terms will be signed before the end of the Examination.	The Applicant set out in detail its position on this access concern and the potential mitigations in the Responses to the Examining Authority's Third Round of Written Questions at Deadline 7 [REP7-017].
Q3.3.0.11	The Applicant	The plots identified for Albanwise Ltd, Row 39 of the Compulsory Acquisition Objections Schedule [REP6-023] appears not to include 12/03 & 12/05- Acquisition of Permanent New Rights.  a. By reference to the Land Plans, please confirm the position. b. Update the Compulsory Acquisition Objections Schedule as necessary.	The two parcels identified are adopted highway parcels. There is a rebuttable presumption that the neighbouring landowner owns the subsoil of the half width of the highway, as included in the Book of Reference, and therefore the Compulsory Acquisition Objections Schedule has been updated accordingly.	
Q3.3.0.11	National Farmers Union	The plots identified for Albanwise Ltd, Row 39 of the Compulsory Acquisition Objections Schedule [REP6-023] appears not to include 12/03 & 12/05- Acquisition of Permanent New Rights.  a. By reference to the Land Plans, please confirm the position. b. Update the Compulsory Acquisition Objections Schedule as necessary.	Albanwise Ltd Practical issues are still being discussed in relation to site specific matters.	The Applicant remains in negotiations with the landowner and their professional advisors.
Q3.3.0.12	The Applicant	The plots identified for Christopher S Wright, Row 49 of the Compulsory Acquisition Objections Schedule [REP6-023] appears not to include 24/05, 24/10, 24/16 & 25/04 - Acquisition of Permanent New Rights.  a. By reference to the Land Plans, please confirm the position.  b. Update the Comp ulsory Acquisition Objections Schedule as necessary.	The two parcels identified are adopted highway parcels. There is a rebuttable presumption that the neighbouring landowner owns the subsoil of the half width of the highway, as included in the Book of Reference, and therefore the Compulsory Acquisition Objections Schedule has been updated accordingly.	
Q3.3.0.12	National Farmers Union	The plots identified for Christopher S Wright, Row 49 of the Compulsory Acquisition Objections Schedule [REP6-023] appears not to include 24/05, 24/10, 24/16 & 25/04 - Acquisition of Permanent New Rights.  a. By reference to the Land Plans, please confirm the position.  b. Update the Compulsory Acquisition Objections Schedule as necessary.	S.Wright  a) Relates to AC56. It has been agreed that this access route will not be used. Alternative access, south of the easement strip is still being discussed.	The Applicant has undertaken to not use Access AC56 and to use the landowner's preferred accesses from the south following the private agreement and discussions with the Landowner for operational access purposes. HoTs are not currently signed with this landowner. However the Applicant remains confident that these can be concluded before the close of the examination and, if agreed, will capture this undertaking. Where the Applicant has agreed not to use





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
				certain accesses and utilise alternatives, these will remain in the DCO in case negotiations break down or the landowner defaults on the agreements.
Q3.3.0.13	The Applicant	The Trustees of Stinton Hall Trust, Row 42 of the Compulsory Acquisition Objections Schedule [REP6-023] do not seem to be included in the Book of Reference [REP1-011].  a. By reference to the Book of Reference, please confirm the position.  b. Update the Book of Reference and Compulsory Acquisition Objections Schedule as necessary.	<ul> <li>a. The land included in the Book of Reference known as the Salle estate is owned in title by 4 trustees, being Sir David Robert Macgowan Chapman Baronet, Grant Stanley Pilcher, Michael Alan Dewing, William Robert Bartle Edwards. However through discussions with the representing Land Agent in relation to this land, they requested that the land was split into two separate trusts referred to as the Salle Park Trust and Stinton Hall Trust. This approach is for the purposes of the private agreements and the correct landownership remains as documented in the Book of Reference.</li> <li>b. On this basis the Applicant considers the Book of Reference and Compulsory Acquisition Objections Schedule do not require updating.</li> </ul>	
Q3.3.0.13	National Farmers Union	The Trustees of Stinton Hall Trust, Row 42 of the Compulsory Acquisition Objections Schedule [REP6-023] do not seem to be included in the Book of Reference [REP1-011].  a. By reference to the Book of Reference, please confirm the position.  b. Update the Book of Reference and Compulsory Acquisition Objections Schedule as necessary.	Stinton Hall Trust: a) Savills believe that this client should be in the book of reference.	The Applicant confirmed the position in the Responses to the Examining Authority's Third Round of Written Questions at Deadline 7 [REP7-017]. The land across the whole Salle Estate is registered at the Land Registry to the trustees as named in the Book of Reference. The land agent acting for the Salle Estate has asked that the land is split across two separate trusts in the HoTs, however the legal ownership position is correct as set out in the Book of Reference. This will be clarified and dealt with as part of the due diligence through the agreements.
Q3.3.0.14	National Farmers Union	In addition to the accesses referred to in Questions Q3.2.0.4 - Q3.2.0.10, are there any other accesses that are of particular concern and if so, what are the specific details of that concern? Indicate by reference to the Access to Works Plan [APP-011].	<ul> <li>Clients of LIG below need to be added to the book of reference.</li> <li>Jones - M and D Jones has not been included in the COAS. Discussions are still ongoing in respect of AC128 and AC129. The route can be accessed directly from the road making the additional accesses sought unnecessary.</li> <li>Begg - How will Vattenfall allow for black current planting to be adjusted to accommodate the proposed scheme? Plantings are carried out on a 10-year cycle, and this decision needs to be made now for 2022 planting. What is the potential to delay planting if the soil has not sufficiently recovered from the works?</li> </ul>	Reference 35 and 52 in the CAOS refers to M and D Jones. The Applicant is not aware of the concerns regarding the access as stated in the NFU response and has requested clarification with the landowner and land agent directly. In response to the Blackcurrant planting queries, losses will be compensated under the terms set out in the private agreements. In the absence of an agreement, claims will be settled in line with the Compensation code.
Q3.3.0.15	The Applicant	With reference to the Access to Works plans [APP-011] confirm what arrangements would be in place that would enable temporary possession for access purposes as well as enable the land to be used by others during the period of temporary possession? How would these arrangements be secured?	Where possible the Applicant will minimise the impact on other users of the accesses when travelling from the highway to the works.  The Outline Traffic Management Plan (OTMP), secured under Requirement 21 of the dDCO and subject to approval by the relevant planning authority in consultation with the highway authority, includes a range of delivery management measures including co-ordinating HGV delivery demand with local businesses.  In relation to field access across the cable corridor, the OCoCP [REP5-011] includes the provision that temporary means of access will be provided to severed fields for vehicles and	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number			machinery in order to ensure access is maintained wherever practicable and further that wherever practicable, appropriate planning and timing of works will be agreed with landowners and occupiers, subject to individual agreements, to reduce conflicts.  In addition, the role of the ALO (as referred to in Appendix B of the OCoCP) will include ensuring that landowners and occupiers are consulted in respect of requirements relating to field entrances, accesses and accesses across the construction strip to land-locked or severed land parcels. The OCoCP is secured under dDCO Requirement 20.	
Q3.3.0.15	National Farmers Union	With reference to the Access to Works plans [APP-011] confirm what arrangements would be in place that would enable temporary possession for access purposes as well as enable the land to be used by others during the period of temporary possession? How would these arrangements be secured?	The Option agreement provides for all facilities reasonably required for maintaining and affording means of communication and access between parts of any land unit of the Grantor temporarily severed by reason of the exercise of the Rights.  How would these arrangements be secured: The NFU would like to see these arrangements as agreed in the Option to be carried out by the ALO communicating between the landowner/occupier and the developer.	The Agricultural Liaison Officer (ALO) is secured in the OCoCP [REP5-010] and the role is described within Appendix B of the OCoCP. This includes the ALO being the 'prime contact for ongoing engagement about practical matters with landowners, occupiers and their agents before and during the construction process'. Specifically, the OCoCP outlines that the ALO will ensure that 'landowners and occupiers are consulted in respect of requirements relating to field entrances and accesses across the construction strip and land-locked or severed land parcels'.
Q3.3.0.16	The Applicant	Update progress in securing written consent under s135(2) from the Crown Estate for inclusion of the Crown plots in the dDCO [REP5-045, Q2.3.0.9].	The Applicant and the Crown Estate Commissioners (the Commissioners) are continuing to work together to agree a position which would provide the Commissioners with sufficient assurance as to the way in which compulsory acquisition powers of any third party interests in Crown land forming part of the Crown Estate may be exercised. This would permit the Commissioners to provide their consent to the compulsory acquisition of the third party interests in the relevant plots for the purpose of section 135(1) of the Planning Act 2008 and their consent to the provisions of the dDCO for the purpose of section 135(2) of the 2008 Act. The Applicant and the Commissioners are mindful of the date for the closing of the Examination and both parties intend to write to the Planning Inspectorate as soon as possible to confirm the final position. This response has been agreed with the Commissioners.	
Q3.3.0.17	The Applicant	Indicate with reference to the Access to Works plans [APP-011] all other locations within the application where land subject to temporary possession for access purposes, is used by others for access purposes. What are the detailed arrangements that would enable the land to be used by others during the period of temporary possession? How would this be secured?	All accesses identified on the Land Plans and Access to Works Plans are for permanent rights of access during operation. A subset of the accesses will be potentially required for specific aspects of construction also and these are fully detailed in Table 2.1 of the Outline Access Management Plan (OAMP) [APP-701].  All accesses are occupied and utilised by Landowners and other third parties. Where possible the Applicant will minimise the impact on other users of the accesses when travelling from the highway to the works.  The Outline Traffic Management Plan (OTMP), secured under Requirement 21 of the dDCO and subject to approval by the	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
Question		What is the latest position regarding:  a. progress in reaching agreement with the Statutory Undertakers identified inthe Compulsory Acquisition Objections Schedule;  b. whether protective provisions are in a satisfactory form that is agreed with relevant parties and if not, what steps are	relevant planning authority in consultation with the highway authority, includes a range of delivery management measures including co-ordinating HGV delivery demand with local businesses.  In relation to field access across the cable corridor, the OCoCP [REP5-011] includes the provision that temporary means of access will be provided to severed fields for vehicles and machinery in order to ensure access is maintained wherever practicable and further that wherever practicable, appropriate planning and timing of works will be agreed with landowners and occupiers, subject to individual agreements, to reduce conflicts.  In addition, the role of the ALO (as referred to in Appendix B of the OCoCP) will include ensuring that landowners and occupiers are consulted in respect of requirements relating to field entrances, accesses and access across the construction strip to land-locked or severed land parcels. The OCoCP is secured under dDCO Requirement 20.  a.  National Grid  Agreement has been reached with National Grid Gas, and discussions with National Grid Electricity are at an advanced stage. The Applicant considers that agreement will be reached by the close of the Examination.  Network Rail	Applicant's Comments
		required to avoid serious detriment to the carrying on of their undertakings;  c. the position of Highways England in relation to property agreements as per Question 2.3.0.12 [REP6-014 Applicant's Comments on Responses to the ExA's Further Written Questions].	The Option Agreement/Deed of Grant have not yet been agreed between the parties but there are only a couple of points outstanding remaining to be agreed. The Applicant therefore expects Network Rail to be in a position to write to the Planning Inspectorate shortly to confirm its acceptance to the protective provisions.  Cadent Gas  Agreement has been reached with Cadent which the Applicant expects will shortly be signed to allow removal of Cadent's representation.  UK Power Networks  Agreement has been reached with UK Power Networks which sets out the interaction between the Project and the assets of UK Power Networks. UK Power Networks did not submit a representation to the dDCO.  Eni UK Limited  As the Applicant outlined in response to Further WQ 2.3.0.28 [REP5-045] Eni UK Limited has confirmed that it no longer holds an interest in the land affected by the project.  b.  National Grid  Protective provisions are in an agreed form between the parties and on completion of the agreements, these will be incorporated in the dDCO.	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number				
			Network Rail As the Applicant outlines above, the Option Agreement/Deed of Grant have not yet been agreed between the parties but there are only a couple of points outstanding remaining to be agreed. The Applicant therefore expects Network Rail to be in a position to write to the Planning Inspectorate shortly to confirm its acceptance to the protective provisions; the Applicant will then include the agreed form protective provisions within the dDCO. Cadent  Protective provisions are in an agreed form between the parties and on completion of the agreement, these will be incorporated in the dDCO.  UK Power Networks  Protective provisions are in an agreed form between the parties.  Other relevant undertakers will be dealt with by the general protective provisions in the dDCO (Schedule 17, Part 1).  c. The Applicant is continuing to engage with Highways England with regards to their requirements prior to detailed design. The Applicant is currently awaiting a response from Highways England. The Applicant remains confident that they will satisfy the requirements of Highways England prior to the close of	
Q3.3.0.19	The Applicant	What would be the implications for compulsory acquisition if the SoS decided that trenchless installation techniques should be used to pass under either the B1149 and/ or Church Road, Colby?	Examination.  If the Applicant were to retain flexibility in the trenchless crossing method that could be most appropriately employed for the location (e.g. HDD, micro-tunnelling, or auger boring) then additional temporary land, outside the current Order limits, would be required to support the range of trenchless crossing methods. This temporary land requirement would be the same as included for all committed trenchless crossings along the cable route, as secured in Requirement 16(15) of the dDCO as up to 7,500m² on the drilling entry side and 5,000m² on the drill exit side.  However, as the Applicant also explains in response to Q3.5.3.7 below, Norfolk Vanguard, in response to the letter from the Secretary of State has developed a bespoke design whereby, in the event the Secretary of State decides that a trenchless crossing of the B1149 is necessary, a single compound could be included within the existing order limits. The assessment for this bespoke design (which is directly applicable to Norfolk Boreas under scenario 2) was submitted at Deadline 7 of the Norfolk Boreas examination (ExA.AS-3.D7.V1). This bespoke design only accommodates the HDD trenchless crossing method (and no other trenchless crossing method) in order to minimise supporting construction compound requirements, such that the compound could be wholly contained within the current Order limits. At all other trenchless crossing methods so that the most appropriate solution can be employed following ground investigation, cable design (sizing) and detailed design of the trenchless crossing.	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
			To accommodate a HDD at this location within the Order limits would be constraining the Project design prior to detailed design and investigations being conducted. In this bespoke trenchless design, a temporary works compound of 100m x 45m (4,500m²) would be required to support the works within the existing Order limits.  At Church Road, Colby, an equivalent constrained HDD compound within the Order limits could be implemented if the Secretary of State was minded to require a trenchless crossing at this location. NNDC have recently [REP6-043] proposed the potential extension of the running track to the north to avoid the current crossing location of Church Road if a trenchless crossing was employed at this location. It is the Applicant's position that this is not a suitable alternative and if such an approach was taken, this would result in approximately 400m of running track length with 6m width (2,400m²) outside of the current Order limits. Further details are provided in the Position Statement Church Road, submitted at Deadline 7 [ExA.as-1.D7.V1].  It is the Applicant's position that an open cut crossing method is shown to be most appropriate at both of these locations to minimise overall impacts and such a method would be fully	
			retained within the Order limits without undue project design constraints.	
Q3.3.0.21	The Applicant	Whilst the ExA acknowledges that in relation to National Trust land, the National Trust has withdrawn its objection [REP2-078], the ExA still needs to decide whether what is applied for, is necessary. Provide a summary of the case in relation to \$130 – National Trust land including references to the Examination Library as appropriate.	Under section 130 of the Planning Act 2008 (the Act), an order granting development consent is subject to special parliamentary procedure to the extent that it authorises compulsory acquisition of land belonging to National Trust which is held by the Trust inalienably where the conditions in subsection (3) are met. These conditions are that a representation or objection to the compulsory acquisition of land has been made by the National Trust and that objection has not been withdrawn.  The Applicant requires land belonging to the National Trust, or in which the National Trust has an interest in order to deliver work No.6 forming part of the cable corridor.  As a result, the Applicant has scheduled land interests belonging to the National Trust in its application Book of Reference at Plots 15/06, 15/07, 15/08, 15/09, 15/10, 15/11, 15/12, 15/13, 15/14, 15/15, 16/02, 16/03, 16/04, 16/05, 16/07, 16/08, 16/09, 16/10,	
			16/11, 16/12, 16/13, 16/14, 17/01, 17/02, 17/04, 17/05, 17/06, 17/07 18/01 and 18/02, and the National Trust is an occupier of Plot 17/03.  However heads of terms and an Option Agreement have been agreed with the National Trust. As a result the National Trust has withdrawn its objection to the project [REP2-078], and the Applicant therefore submits that section 130 of the Act is no longer engaged.	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
Q3.3.0.22	The Applicant	Summarise the case in relation to s132 – Open Space with reference to documents in the Examination Library.	The Applicant confirms that there are 2 areas where section 132 of the PA 2008 is engaged. Paragraph 8.5 of the Statement of Reasons sets out the position in relation to landfall, and the crossing of the Marriot's Way (the Open Space Land). There is no surface work in relation to the Open Space Land as the Applicant has committed to trenchless crossing.	
			Paragraph 8.18 of the Statement of Reasons sets out the Applicant's position in relation to the Open Space Land – the Open Space Land, when burdened with the rights to install, inspect and maintain the cables, fibre optic cables and ducts, will not be any less advantageous to persons in whom it is vested, other persons, if any, entitled to rights of common or other rights, and to the public. There will be no impact on public	
			access to this land and there will be no less advantageous beneficial use of the Open Space Land for any party currently interested in that land. The Applicant therefore submits that section 132(3) of the Planning Act 2008 is therefore engaged.	
Q3.3.0.23	The Applicant	What is the latest position regarding progress with securing final, signed copies of the Funding Agreement [APP-025] between the Applicant, (Norfolk Boreas Limited), the Company (Vattenfall Wind Power Limited) and the Parent Company (Vattenfall AB) and submitting these into the Examination and timescale for submitting signed agreement into the Examination?	The funding agreement between Vattenfall AB and the Applicant was completed on 10 March 2020. A copy of the completed agreement has been submitted at Deadline 7 (document reference ExA.AS-6.D7.V1).	
Q3.3.0.24	The Applicant	Confirm whether the funding agreement covers the costs of implementing the project and the funding required for Compulsory Acquisition and temporary possession. If not, how would the funding be secured?	As the application for the Order includes a request for powers of compulsory acquisition for the Applicant, a Funding Statement was required to be submitted with the application as per Regulation 5(2)(h) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the APFP Regulations) (Funding Statement, paragraph 1.9). The Funding Statement explains how the Applicant proposes to fund the land and rights to be acquired and also the implementation of the Project. It is part of a suite of DCO application documents and should be read alongside those documents, in particular the Statement of Reasons (Funding Statement, paragraph 1.10). The Funding Statement is unchanged since its submission at Application.	
			Information on funding the project The Applicant and Vattenfall AB (the Parent Company) have substantial net assets as well as a positive track record in the field of renewable energy development. The Applicant and the Parent Company have agreed collectively that they are able to procure the required funding for the Project, including all likely compensation liabilities resulting from the exercise of compulsory acquisition powers (Funding Statement, paragraph 3.9). The last published accounts of the Applicant for the year ended December 2018 show a total fixed assets of £2,673,000 (ExA.FWQR.D5.VA).	





Enhancing Society	iogether			
PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question				
Number				
			The Applicant will have the ability to procure the financial	
			resources necessary to fund the works to be authorised by the	
			Order, subject to final Board authority. The Applicant and the	
			Parent Company have the experience and reputation to enable	
			funds to be procured (Funding Statement, paragraph 3.2).	
			The Applicant intends to secure funding for construction of the	
			Project after certainty is obtained on the development consent,	
			the tender process is complete for the major construction	
			contracts and the investment case has been satisfied. Once	
			these criteria are met the Applicant will take a final investment	
			decision (FID) which will irrevocably commit funding (Funding	
			Statement, paragraph 3.3).	
			The Applicant has been at the forefront of financing renewable	
			energy projects for more than 10 years. In that time, it has been	
			involved in many significant renewable energy transactions and	
			construction projects in the UK. The Applicant has considerable	
			experience and expertise in constructing renewable energy	
			projects (Funding Statement, paragraph 3.5).	
			Vattenfall is the second largest developer in the global offshore	
			wind sector, and has invested over £3 billion in the UK, mainly	
			in onshore and offshore wind. Vattenfall now operates more	
			than 1GW of wind and solar power capacity in the UK and plans	
			to invest over €5billion in renewables, mainly offshore wind, in	
			Northern Europe by the end of 2020. The UK will continue to be	
			a growth market for Vattenfall, with Norfolk Boreas (as well as	
			Norfolk Vanguard) providing a very significant next step.	
			The state of the s	
			Information on funding claims for compensation	
			The Applicant has been advised that the total property cost	
			estimates for the acquisition of the required interests in land	
			should not exceed £1.7 million in the event of scenario 1, or £6.8	
			million in the event of scenario 2 (Funding Statement paragraph	
			4.1).	
			The Applicant has sufficient committed funds and resources	
			available to meet (i) the compensation arising from all	
			compulsory acquisition of land and rights pursuant to the DCO	
			and (ii) any statutory blight claims that may arise (Funding	
			Statement, paragraph 4.7).	
			It is not anticipated that claims for statutory blight will arise as	
			a result of the promotion of the Order. Should claims for blight	
			arise as a consequence of the application for the Order being	
			made, and before it is known whether the Project will proceed,	
			the costs of meeting blight claims that are upheld will be met	
			from the capital reserves of the Applicant or the Parent	
			Company (Funding Statement, paragraph 4.8).	
			The Applicant's responses to the ExA's Further Written	
			Questions at Deadline 5 (REP5-045) (at 2.3.0.5 and 2.3.0.6)	
			confirms a breakdown of the estimated costs for the likely levels	
			of compensation that would be required if no voluntary	
			agreements were concluded and compulsory acquisition	
			powers (including temporary possession) were required to	
			acquire all land and interests, as well as the estimated cost of	
			construction of the project.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			The Funding Agreement is designed to cover the costs of acquisition of the required interests in land, and not the funding of the construction of the project with the decision on the funding for the project, as set out above, being taken after there is certainty on the development consent.	
Q3.3.0.25	The Applicant	Confirm how security of funding would be ensured in the event that any or all of the benefit of the Order is transferred to another person (Article 6).	Under the Funding Agreement, the benefit of the Order can be assigned by the Applicant to another person where such assignment is to a person to whom the Secretary of State has provided consent under the Order to receive a transfer of powers in the DCO (save where consent is not required in the limited exceptions outlined in Article 6(11)) (clause 6.2.1 of the Funding Agreement). In such event the parent company would remain responsible to fund the compensation and cost of acquisition of the necessary interests should the assignee fail to settle claims. As such there is the necessary protection for claimants in respect of any outstanding compensation claims following the exercise of any compulsory acquisition powers. The Applicant, having reached agreement on HoTs with the significant majority of landowners and being in the process of settling option agreements, does not expect to have to exercise CA powers but those powers are retained so as to protect against circumstances where either agreement is not reached or in respect of any third party interests. This approach is adopted as good practice on other DCOs.  Article 6(14) of the dDCO also provides that any notice of the	
			transfer of benefit must state: a) the name and contact details of the person to whom the benefit of the provisions will be transferred or granted; b) the date on which the transfer is to take effect; c) the provisions to be transferred or granted; and d) the restrictions liabilities and obligations that will apply to the person exercising the powers transferred or granted.	
			Article 6(14) also provides that confirmation of the availability and adequacy of funds for compensation associated with the compulsory acquisition of the Order land must be provided, save for (1) any transfers to a transmission licence holder, as such parties are regulated by OFGEM and ensured to have strong covenant strength, and (2) when the time limit for claims for the compulsory acquisition of land have elapsed, and any such claims have been resolved or withdrawn.	
Q3.3.0.26	The Applicant	The ExA notes the answer provided at REP5-045, Q2.3.0.21 in relation to Article 24 – Acquisition of subsoil and airspace only. Explain why this should apply to the entirety of the Order Land particularly given that overhead electricity lines and the laying of cables do not extend throughout the Order land.	The Applicant re-confirms its response at Deadline 5 (REP5-045) 2.3.0.21 that it requires the flexibility to apply articles 24 and 25 across the authorised project in order to minimise the extent of the interests to be acquired from owners. The Applicant considers that this is appropriate in the context of subsoil for cables to be laid underground or in the context of subsoil and airspace for electricity lines to be installed overhead where the entire freehold interest may not be required.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			It should, however, be noted that the wording within Article 24 of the dDCO refers to acquisition of rights for subsoil or airspace of the land. The undertaker would not therefore be seeking both of these rights over the entirety of the Order Land as for the most part the undertaker would be using subsoil rights for the cable route but flexibility as to either subsoil, airspace or both is required. The purpose of this article is also to protect a landowner by limiting the strata of an interest to be acquired to that actually needed (instead of acquiring the whole of the land) — enabling the ownership of the unrequired elements to remain with the landowner.	

# 4 Cumulative effects of other proposals

## 4.0 General cumulative effects, including phasing

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			No Questions	

# 4.1 Onshore cumulative effects of other proposals (construction)

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			No Questions	

# 5 Development Consent Order and Deemed Marine Licences

#### 5.0 General

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.5.0.1	The Applicant	Outstanding matters in the dDCO of concern to MMO Provide an update on progress in resolving issues raised by the Marine Management Organisation (MMO) [REP6- 014] related to ExA Written Question 2.5.0.2:  - Cable Crossings;  - Disposal Site queries and references;  - Definition of Inert.	Cable crossings: As stated in the latest version of the SoCG [REP6-029] "The MMO acknowledges the Applicant's comments on the matter of cable crossings and on this occasion accepts that specific instances of cable crossings cannot be specified at this time and volumes of cable protection are secured within the DCO/DML." Therefore, this matter has been agreed within the SoCG	
			Disposal sites: The MMO provided the Applicant with a confirmation letter with the disposal site references for the DCO/DMLs on 4 March 2020, and these have been included within the version of the draft DCO submitted at Deadline 7. There is just one very minor amendment that the MMO have	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number			asked the Applicant to make to the Site Characterisation Report which the Applicant has agreed to, and this is reflected in the updated (and likely final) version which has been submitted for Deadline 7. Therefore, all matters relating to sediment disposal have been agreed.  Definition of Inert:  The Applicant's position is that a definition is not required because, unlike a conventional disposal site, foreign material is not being introduced to the marine environment. Sediment will only be moved between discrete locations within the site, and this will only be over a matter of a few hundred metres. Furthermore, sampling undertaken to support the EIA has shown no evidence that the sediments within the offshore project Order limits contain contaminated material over and above that which occurs naturally (Chapter 9 Marine Water and Sediment quality of the ES [APP-222].  Notwithstanding this, the MMO have provided the Applicant with a proposed definition used by OSPAR 14 Guidelines. The definition is as follows:  "Inert material of natural origin, that is solid, chemically unprocessed geological material, the chemical constituents of which are unlikely to be released into the marine environment. The type of inert material including the reason for its classification as inert should be indicated"  Discussions between the Applicant and the MMO on the requirement for and specific wording of the definition are ongoing and the latest position will be reflected within the SoCG with the MMO which will be submitted at Deadline 8.	
Q3.5.0.1	Marine Management Organisation	Outstanding matters in the dDCO of concern to MMO Provide an update on progress in resolving issues raised by the Marine Management Organisation (MMO) [REP6-014] related to ExA Written Question 2.5.0.2:  - Cable Crossings;  - Disposal Site queries and references;  - Definition of Inert.	- Cable Crossings:  The MMO and the Applicant have now agreed this point and this will be updated in the SoCG at deadline 8.  - Disposal Site queries and references:  The MMO has provided the applicant with the disposal site reference numbers and understands these will be included within the next dDCO.  The MMO requested a minor update to the Site Characterisation Report submitted at (REP5-037) and understands the Applicant will update this for Deadline 7.  - Definition of Inert:  The MMO has discussed this further with the Applicant and is content that this definition is no longer required for the Norfolk Boreas project.	The Applicant is in full agreement with the MMO on all three issues.

#### 5.1 Articles

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
Q3.5.1.1	The Applicant	dDCO Article 15(3) wording regarding Internal Drainage Boards:	As the Applicant explains in response to Q3.5.8.6 below, the Applicant has	
		and the state of t	discussed this matter with the WMA and the parties have come to an	
			agreed approach – the outcome of which results in slightly revised	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number	addressed to.			
		Respond to the Water Management Alliance (WMA) [REP5-057] concern that the use of the word 'belong' in dDCO Article 15(3) does not apply to WMA Member Boards who regulate and maintain but do not own watercourses.	wording within the definition of "specified work" at Schedule 17, Part 7 of the dDCO. This amendment has been made to the revised dDCO submitted at Deadline 7 (document reference 3.1 (version 6)).	
Q3.5.1.2	The Applicant	Article 16: Authority to survey and investigate the land onshore As neither party has responded specifically to the suggestion in Q2.5.1.6 and repeated their former positions, parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.	The Applicant resists any wording which would limit the Applicant to surveys and investigations for a specified duration and with the use of equipment that was only previously specified prior to the survey/investigation. As the Applicant explained in its comments on the NFU's response to Q5.1.7 at Deadline 4 [REP4-011], to do so would add an additional inefficiency on those undertaking the surveys – for example, in the event an extra investigation was required the team would need to withdraw from the land and serve additional notices, then remobilise on site and enter the land a second time. This would increase the overall duration of occupancy on the landowner's land and potentially increase the risk of damage to land and crops.  In any event, as outlined in Appendix B of the OCoCP [REP5-010], the Agricultural Liaison Officer will be appointed by the Applicant prior to the commencement of pre-construction activities and will be the prime contact for ongoing engagement about practical matters with landowners, occupiers and their agents before and during the construction process. This includes undertaking pre-construction and day-to-day discussions with affected parties to minimise disruption to existing farming regimes and timings of activities. It is through this avenue that landowners could raise questions on the surveys.  Accordingly, the Applicant does not consider it necessary to amend the	
Q3.5.1.2	National Farmers Union	Article 16: Authority to survey and investigate the land onshore As neither party has responded specifically to the suggestion in Q2.5.1.6 and repeated their former positions, parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.	Authority to survey and investigate land: The NFU did respond to the last written questions and to confirm we would accept the following wording that landowners will be given an estimate of how long the surveys would take.  But it is not acceptable that Vattenfall only provide an indication of what equipment is likely to be used. The NFU has now agreed this wording within two other DCO applications under the Article covering Authority to Survey. Due to the amount of surveys that will take place it is paramount that landowners know what equipment will be brought on to their land for what survey.  The NFU would still like boreholes to be added in if they are to be carried out. A borehole is not a trial pit. In the Option Agreement the wording does include boreholes or trial pits.	The Applicant provided a response to this question at deadline 7 setting out its position on the concerns (REP7-017, and copied above).  It is necessary for the Applicant to retain flexibility. The type of equipment to be used could vary due to local ground conditions which are only apparent on further investigation of the land. That is why an indication of the equipment to be used can be given but it should not be prescriptive which could exclude any other equipment ordinarily to be used for the purpose of the survey. The Applicant is not therefore able to agree to the NFU's request in this respect. The indication of equipment to be used does not need to be included within the DCO as it would be dealt with by the Agricultural Liaison Officer under the OCoCP.  The Applicant is also keen to understand which two DCOs are being referred to by the NFU?  The Applicant responded to the point regarding bore holes and trial pits in its Written Summary of the Applicant's Oral Case at Issue Specific Hearing 1 and the Applicant refers the ExA to document reference REP1-041. This point was again addressed in the responses to the first round of written questions in response to question 5.1.7 [REP2-021]. The response provided is copied below:





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number				The Applicant considers that the powers within Article 16 in relation to surveying and investigating land include powers for certain excavation works and to make bore-holes. In particular, boreholes are encompassed within trial holes to investigate the subsoil, which is referred to in Article 16(1)(b):
				"make trial holes in such positions on the land as the undertaker thinks fit to investigate the nature of the surface layer and subsoil and remove soil samples"
				Archaeological excavations fall within archaeological investigations under Article 16(1)(c): "carry out ecological or archaeological investigations on such land".
				Article 16 follows precedents from other offshore wind farm DCOs including East Anglia Three (2017) and Hornsea Project Two (2016), the draft Norfolk Vanguard DCO, the draft Hornsea Project Three DCO, and the draft Thanet Extension DCO. Where voluntary agreements are negotiated with landowners, rights of access to survey and investigate land would be exercised under those agreements.
				In the event that works are required which do not fall within Article 16 and are not on land where voluntary agreements have been completed, the Applicant would rely on temporary possession powers under Article 26 of the dDCO to carry out those works.
Q3.5.1.3	The Applicant	Article 26: Temporary use of land for carrying out the authorised project  Both parties have now set out examples of other applications for, and made DCOs which make the case for 14 days' (the Applicant) and 28 days' (the NFU) notice periods before entering on and taking temporary possession of land under Article 26(2) [REP6-014, responses to Q2.5.1.7 and Q2.5.1.8].  1. Parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.	The Applicant relies on its response at Q2.5.1.8 to [REP6-014], as outlined below:  The relevant provisions (sections 18 to 23) of the Neighbourhood Planning Act 2017 (for this question only, the Act) are not yet in force and it is unclear whether or when they will be brought into force, and whether further regulations will be introduced to provide more detail on the operation of the temporary possession regime. As the Act is not yet in force, the Applicant is of the view that it is not currently possible to understand or reflect accurately the temporary possession provisions as intended by Parliament in respect of DCOs. It is not yet known whether the provisions will apply to DCOs or whether there will be any transitional arrangements. The Applicant has therefore applied the 'tried and tested' temporary possession regime that has been included in numerous DCOs to date, and is well understood by practitioners, agents and contractors. Similar provisions were included in the Silvertown Tunnel Order 2018 (article 3(1)(p) and article 29), the Eggborough Gas Fired Generating Station Order 2018 (article 26(12)) and the A19/ A184 Tesco's Junction Alteration Development Consent Order 2018 (article 2(7) and article 29).	
			In contrast to the HS2, A30 Chiverton to Carland Cross and A303 Stonehenge Scheme projects cited by the National Farmers' Union, there are no residential properties within the land identified as subject to compulsory acquisition powers under the dDCO, and the Applicant considers that a 14 day notice period as set out in Article 26 of the dDCO remains appropriate for this project.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.5.1.3	National Farmers Union	Article 26: Temporary use of land for carrying out the authorised project  Both parties have now set out examples of other applications for, and made DCOs which make the case for 14 days' (the Applicant) and 28 days' (the NFU) notice periods before entering on and taking temporary possession of land under Article 26(2) [REP6-014, responses to Q2.5.1.7 and Q2.5.1.8].  1. Parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.		would also be consistent with the applicant for the Norfolk Vanguard project.

## 5.2 SCHEDULE 1 PART 1: Authorised Development

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			No Questions	

# 5.3 SCHEDULE 1 PART 3: Requirements

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.5.3.1	The Applicant	Requirement 15: Scenarios, stages and phases of authorised development onshore Provide your proposed wording for sequential post-consent approvals for stages if required, ensuring it takes on board comments from Breckland Council and NNDC regarding avoiding a disjointed approach [REP5-045, response to Q2.5.1.5] and [REP6-014, response to responses to Q2.5.1.5 and Q2.5.7.1].	The Applicant has discussed this matter with the relevant planning authorities (RPAs) on a conference call on 12 March 2020 and the Applicant understands that there are no differences of opinion in relation to stages. The Applicant and the RPAs are in agreement that it is prudent to apportion the route into stages to align with the RPA boundaries. As the Applicant has outlined previously in REP4-019, there may also be stages for discrete elements of the onshore transmission works such as the landfall, the onshore project substation, and the National Grid extension.  Following the Applicant's response to WQ2.5.1.5 submitted at Deadline 5 [REP5-045], the Applicant has considered other DCOs in the context of partial discharge. There is no precedent for a partial discharge mechanism found in other DCOs. However, the Applicant considers that, as currently drafted, there is sufficient flexibility in the DCO to set appropriate stages to align with the construction approach (once a contractor is appointed) as well as RPA boundaries.  If it became apparent that the Applicant needed to proceed with a distinct element of the works within a stage prior to having discharged all the relevant plans for that stage then, rather than a partial discharge, the Applicant considers that it may be more appropriate to update and resubmit the written scheme for stages under R15(4); this would then allow the Applicant to isolate approval for those works under a (new) stage. From a practical point of view, however, it would be prudent for the contractors and the Applicant to be comfortable that there are no	





PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
			potential issues or areas of concern from the RPAs for any stages within the RPA administrative area before proceeding.	
			In this context it may be appropriate to amend R15(4) to make it explicit that the written scheme for stages can subsequently be amended as follows:	
			15(4) The onshore transmission works must not commence until a written scheme setting out the stages of the onshore transmission works for the relevant onshore phase has been submitted to the relevant planning authority, which scheme may subsequently be amended from time to time as notified to the relevant planning authority.	
			Whilst the Applicant does not consider the above text to be entirely necessary, the Applicant has updated the dDCO at Deadline 7 accordingly.	
Q3.5.3.2	The Applicant	Requirement 15: Scenarios, stages and phases of authorised development onshore Your response to NNDC's suggested wording for R15 additions [REP6-014, response to NNDC response to Q2.5.1.5] refers to its suggestion regarding proposed additions of timetables for discharge of Requirements, but is not clear regarding the proposal to include "an indication as to when each stage is expected to commence and complete".  Provide a response.	The written scheme notifying the stages under R15(4) may be discharged at an early stage following appointment of contractors. Therefore, at the time of submission of the scheme, the anticipated construction start and finish dates for each stage may not be known. Given this, the Applicant considers that this element of detail is more appropriate to provide pursuant to the PPA, along with programmes for discharge of Requirements relating to each relevant stage. As the Applicant outlines in response to Further Written Question 2.5.7.1 [REP5-045] the PPA would cover, amongst other things, a project plan and programme for the timely discharge of Requirements across the "stages" (supported by PPA funded resource). The PPA is a more flexible mechanism to enable regular dialogue	
			and liaison through, for example, meetings with the RPAs. It is through this iterative process that accurate and up to date information – including on the expected programme for discharge – could be shared with the RPAs.	
Q3.5.3.4	The Applicant	Requirement 15: Scenarios, stages and phases of authorised development onshore  Parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.	The Applicant refers the ExA to its response to WQ Q3.5.3.1 and Q3.5.3.2 above as well as its previous response to Q2.5.1.5 and Q2.5.7.1 submitted at Deadline 5 [REP5-045] together with its comments on responses to these respective questions submitted at Deadline 6 [REP6- 014].	
			The Applicant has reviewed the previous submissions and the Applicant does not consider that any further changes are necessary to either Requirement 15 or the related Schedule 16 discharge process. This process was agreed during the Norfolk Vanguard examination and the Applicant therefore considers that there is benefit for all parties (the Applicant, RPAs, and stakeholders) of ensuring consistency across both projects in the discharge or requirements. The Applicant also refers the ExA to NNDC's response to Q2.5.0.3 at Deadline 5 [REP5-067], which concurs with this position.	
			The Applicant will continue to discuss these matters with the RPAs and the Applicant has agreed to share a more detailed note on PPAs, which sets out a further explanation for potential programmes and liaison, with the RPAs.	
Q3.5.3.5	Broadland District Council	Requirement 15: Scenarios, stages and phases of authorised development onshore Submit any comments on NNDC's suggestions, the Applicant's response and/ or whether you would want to see some or all of NNDC's suggestions incorporated in R15.	Useful reference and can see no reason why it shouldn't be incorporated into the Requirements of the DCO.	The Applicant does not consider it would be appropriate to secure NNDC's suggestions within Requirement 15. The Applicant refers Broadland District Council to the Applicant's response to WQ3.5.3.1, WQ3.5.3.2, and WQ3.5.3.4 (in REP7-017 and copied above) submitted at Deadline 7.





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number				
Q3.5.3.6	The Applicant	Requirement 16 (10): Levels set for the National Grid substation extension  Should Requirement 16(10) of the dDCO set out different existing ground levels for Scenarios 1 and 2?	The standard design for the National Grid substation extension would be to make any extensions to both the east and west (Scenario 1 and Scenario 2) at the same ground level as the existing substation. The worst case in the Environmental Statement (ES) has been assessed on this basis. This allows for a continuous level busbar (the 400kV bar on which connections are made), including associated connections to the overhead line, switches and cable connections across the entire site. This approach maintains common electrical clearances for equipment and level access routes throughout the substation, which reduces construction, commissioning and operational risks.  The standard design of a common ground level for both extensions being continuous with the existing substation has been assessed within the Environmental Statement (ES) including the Landscape and Visual Assessment and associated photomontages. The dDCO secures the dimensions as assessed within the ES.  Accordingly, Requirement 16(10) of the dDCO does not need to set out	
			different existing ground levels for Scenario 1 and 2.	
Q3.5.3.7	The Applicant	<ol> <li>Requirement 16 (13): Trenchless installation techniques</li> <li>Are there any updates required for the Clarification Note Trenchless Crossings B1149 and Church Road, Colby [REP4-017] in the light of D5, D6 representations, and subsequent discussions with NCC?</li> <li>How can the Clarification Note Trenchless Crossings B1149 and Church Road, Colby [REP4-017], which sets out more details for open cut trenches in these two locations, be secured if trenchless crossings are not recommended for the purpose of passing under the B1149 and Church Road, Colby?</li> <li>Would the entire document or parts of it be required to be secured?</li> <li>If part, provide a new document containing the relevant parts.</li> <li>Without prejudice, set out appropriate wording to be included in the dDCO and any other relevant documents, including securing any further details, which would enable the SoS to include the use of trenchless installation techniques to pass under either or both of these locations, for scenario 2, if so required.</li> <li>There are further questions related to technical and land related aspects of both crossings in Section 12 of these questions.</li> </ol>	<ol> <li>The Applicant will update the Trenchless Crossing clarification note to reflect the site specific aspects which were raised and addressed through Deadline 5 and Deadline 6 representations. The Updated clarification note will be submitted at Deadline 8 and will include:         <ul> <li>Two week period for open cut crossing works at this specific location including all necessary traffic management measures;</li> <li>Working outside of normal construction hours may be a requirement of a trenchless crossing or could be a choice for open cut crossing if beneficial to minimise the period of works;</li> <li>Traffic management measures will be required throughout the period of an open cut crossing however, no active works are required outside of construction hours. Active works may be required for a trenchless crossing outside of construction hours for technical reasons;</li> <li>Updates to temporary land requirements and associated HGV deliveries to deliver materials required to support trenchless or open cut crossing methods at these specific locations.</li> </ul> </li> <li>The Clarification Note Trenchless Crossings B1149 and Church Road, Colby [REP4-017] considers, following requests from NCC and NNDC, the comparative methods for a trenchless crossing and an open cut crossing at the B1149 and Church Road. The purpose of the document is to illustrate the relative differences between an open cut and trenchless crossing method at these locations, noting that trenchless methods allow mitigation of direct impacts to the features being crossed but result in different impacts associated with the technical requirements of the method such as additional plant, materials, temporary land requirements and timescales. The document provided [REP4-017] was a clarification note to explain the differences in impact between each type of crossing. The full and detailed construction method statement for the relevant crossing would be included within the final</li></ol>	





Enhancing Societ				
PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			be provided in accordance with the final CoCP under Requirement	
			20(2)(g), it is not considered necessary to secure the information	
			contained in the clarification note.	
			3. It is the Applicant's position that evidence has been submitted which	
			demonstrates that open cut crossing methods are appropriate and	
			feasible at these locations. For the B1149, the Applicant has	
			addressed every issue raised by Norfolk County Council (NCC) to	
			reach a position where NCC has no technical reason to object to the	
			open cut crossing method. Notwithstanding this, the Applicant has	
			submitted a Technical Note Responding to Norfolk County Council's	
			Request for Trenchless Crossings of the A1067 and B1149 as	
			Appendix 2 of REP2-050, as well as a full assessment of the	
			trenchless crossing of the B1149 (ExA.AS-2.D7.V1). These	
			assessments are listed as documents considered to form part of the	
			ES, which is itself a certified document under Article 37 and Schedule	
			18 of the dDCO.	
			Church Road, Colby	
			As explained in the Position Statement Church Road, Colby [ExA.AS-	
			1.D7.V1] submitted at Deadline 7, a trenchless crossing in this location	
			would not achieve NNDC's aims of avoiding impacts to trees without an	
			amendment to the Order limits to accommodate an alternative access. In	
			addition, a full assessment of the alternative proposed would be required.	
			A high level review of the alternative proposed has been undertaken by the	
			Applicant and has been included in the position statement [ExA.AS.D7.V1]. This indicates that without further assessment and mitigation, potential	
			impacts (not previously assessed) could arise in respect of noise and	
			landscape and visual receptors. It could also introduce significant safety	
			risks to road users along Church Road as a result of introducing two	
			temporary junctions on a bend. Please also refer to the Applicant's	
			response to Q3.12.05.	
			, as position of <b>Q</b>	
			B1149	
			The introduction of a trenchless crossing in this location would introduce a	
			potentially significant noise impact to the nearest residential property and	
			extend the construction programme for this crossing from 1-2 weeks to 9-	
			10 weeks. However, should the SoS be minded to include a trenchless	
			crossing of the B1149, Norfolk Vanguard has undertaken an environmental	
			assessment of this potential change to the previously assessed working	
			methodology. As the same approach and methodology would be employed	
			by Norfolk Boreas under Scenario 2 (with the crossing being undertaken by	
			Norfolk Vanguard under Scenario 1), this assessment is considered directly	
			applicable to Norfolk Boreas and has been submitted at Deadline 7 (ExA.AS-	
			2.D7.V1). The assessment identifies that trenchless crossings require the	
			flexibility to extend into the evening and night time due to the continuous	
			nature of those activities, and in the event of evening or night time working	
			there is the potential for significant construction noise impacts to occur at	
			the nearest residential property. Accordingly, construction noise mitigation	
			would be required; however, this would be captured within the	
			Construction Noise Management Plan submitted with the final Code of	
			Construction Practice, which is already secured under DCO Requirement	
			20.	





Question Number addressed to:	Amendments required to the dDCO  The commitment to trenchless crossing methods is secured under dDCO Requirement 16(13). Therefore, should the SoS be minded to include a trenchless crossing of the B1149 and/or Church Road then these locations will need to be included as an addition at Requirement 16(13), with reciprocal changes in Schedule 6 and Schedule 8 of the dDCO as follows:  Schedule 1, Part 3, Requirements:  (13) In the event of scenario 2, trenchless installation techniques must be used for the purposes of passing under—  (t) B1149 (Work No. 6) (u) Church Road (Work No. 5)	
	The commitment to trenchless crossing methods is secured under dDCO Requirement 16(13). Therefore, should the SoS be minded to include a trenchless crossing of the B1149 and/or Church Road then these locations will need to be included as an addition at Requirement 16(13), with reciprocal changes in Schedule 6 and Schedule 8 of the dDCO as follows:  Schedule 1, Part 3, Requirements:  (13) In the event of scenario 2, trenchless installation techniques must be used for the purposes of passing under—  (t) B1149 (Work No. 6)	
	Schedule 6, Part 2, Scenario 2: Land in which only New Rights etc., may be acquired:  1. Plot 13/05 for Church Road will need to be removed from 'Minor crossings inc. highway' and incorporated in the row immediately below in 'Minor crossings inc. highway required to be undertaken by trenchless crossing'  2. Plot 19/05 for the B1149 will need to be removed from 'Minor crossings inc. highway' and incorporated in the row immediately below in 'Minor crossings inc. highway required to be undertaken by trenchless crossing'.  These rows are currently located on page 158-160 of the tracked change dDCO submitted at Deadline 5 (REP5-004).  Schedule 8, Part 2, Scenario 2: Land of which temporary possession may be taken:  1. Plot 13/05 for Church Road will need to be removed from works relating to "Facilitating construction and carrying out the authorised project; carrying out the authorised project; access for carrying out the authorised project; trenchless crossing zone for construction and laydown and carrying out the authorised project; trenchless crossing zone for construction and laydown and carrying out the authorised project; carcess for carrying out the authorised project; access for carrying out the authorised project; access for construction and laydown and carrying out the authorised project; access for construction and laydown and carrying out the authorised project; access for construction and laydown and carrying out the authorised project; access for construction and laydown and carrying out the authorised project; caccess for carrying out the authorised project; trenchless crossing zone for construction and laydown and carrying out the authorised project; caccess for carrying out the authorised project; trenchless crossing zone for construction and laydown and carrying out the authorised	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			Finally, it would also be necessary for the Applicant to provide an updated version of the Works Plan at the time in which the documents are sent for certification under Article 37, which incorporates these additional trenchless crossings in this location.	
Q3.5.3.8	Broadland District Council	Requirement 16 (13): Trenchless installation techniques  1. Provide any comments on the points above.  2. Regarding point 3. above, provide responses to the Applicant's D7 response at D8.	1. Trenchless crossing at B1149 should be added to the list at (para. 13) not only for the highway safety reasons given by the Highway Authority but also to reduce the impact on the natural environment that will be destroyed as a result of the open cut technique and the diversion lane.  2. Uncertain what this is referring to	The Applicant's position on a trenchless crossing of the B1149 is provided in response to ExA Q3.5.3.7 (see above) and the position on the hedgerow removal is provided in response to ExA Q3.12.0.4 (see below).  The traffic management required for an open cut crossing would result in the removal of a section of hedgerow and could potentially impact on two trees at this location, however their removal will not impact on landscape character as the roadside vegetation is predominantly hedgerows. To mitigate impacts the Applicant will seek to avoid the trees through mircositing during the detailed design stage. All hedgerows will be reinstated and if removed trees will be replaced. As a result, the ecological and landscape and visual impacts associated with a trenched crossing at the B1149 are short term and not significant.  As detailed in the Norfolk Vanguard environmental assessment of the trenchless crossing at the B1149 [REP7-033], a trenchless crossing requires the flexibility to extend into the evening and night time due to the continuous nature of those activities, and in the event of evening or night time working there is the potential for significant construction noise impacts to occur at the nearest residential property which would require enhanced mitigation.  It is the Applicant's position that evidence has been submitted which demonstrates that an open cut crossing method is appropriate and feasible at this location.
Q3.5.3.10	The Applicant	Requirement 19: Implementation and maintenance of landscaping  1. How can a ten-year obligation that would rely upon landowners providing consent for replacement planting be secured?  2. In your opinion can this be achieved by amending Requirement 19(2) and Article 27(12) as suggested by NNDC?  3. What would be the implications for Schedule 6?  4. How would the six tests in relation to Requirements be met (necessary; relevant to planning; relevant to the development to be permitted; enforceable; precise; and reasonable in all other respects)?  5. Respond to NNDC's points regarding the process you would go through to secure that landowner consent for replacement planting, what happens if this consent cannot be secured, whether additional tree planting could be delivered/ secured in other location(s) where landowner agreement has been/ can be secured?  6. As well as the agreed addition to the OLEMS para 147, suggested by NNDC [REP6-043, para 2.11] and updated SoCG [REP6-036, Page 52] have you included further	<ul> <li>1. &amp; 2. Requirement 19(2) of the dDCO could be updated to secure a ten year maintenance of landscaping obligation. Following further consideration and a discussion with NNDC on a conference call held on 19 March 2020, the Applicant has agreed to include updated wording in Article 27(12) and Requirement 19 of the dDCO to reflect NNDC's request. The wording, included in the dDCO submitted at Deadline 7 (document reference 3.1 (version 6)), is as follows:</li> <li>Article 27  "(12) In this article "the maintenance period" means—  i. for the district of North Norfolk, the period referred to in requirement 19(2) in relation to the maintenance of landscaping;</li> <li>ii. in relation to any other part of the authorised project, means the period of 5 years beginning with the date on which the authorised project first exports electricity to the national electricity transmission network."</li> <li>Requirement 19  "(2) Any tree, hedge, or shrub planted within the district of North Norfolk as part of an approved landscaping management scheme that, within a period of ten years after planting, is removed, dies or becomes,</li> </ul>	





Enhancing Society		Overtions	Interested Darties Despuys at Deadline 7.	Applicant/s Commonts
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		wording as suggested to set out the process? If so what, and is it agreed with NNDC?  7. Submit any additional information to assist the ExA in reaching its recommendation to the SoS.	in the opinion of the relevant planning authority, seriously damaged or diseased must be replaced in the first available planting season with a specimen of the same species and size as that originally planted unless a different species is otherwise approved by the relevant planning authority.  (3) Any other tree, hedge or shrub planted as part of an approved	
			landscaping management scheme that, within a period of five years after planting, is removed, dies or becomes, in the opinion of the relevant planning authority, seriously damaged or diseased must be replaced in the first available planting season with a specimen of the same species and size as that originally planted unless a different species is otherwise approved by the relevant planning authority."	
			As a result of these amendments, the 10 year re-planting period in North Norfolk's district is secured in the dDCO and the Applicant therefore considers that this matter is resolved.	
			3. In relation to Schedule 6, there would not need to be any changes to the rights listed. The general compulsory acquisition (CA) right listed at Schedule 6 (Part 2, Scenario 2) of the dDCO, under 'Full cable rights' at	
			paragraph 1 states that the Applicant has "The right to enter onto and remain on the land for the purposes of construction, installation, operation, maintenance and decommissioning of the authorised project and to". This therefore provides the Applicant with a right to maintain	
			landscaping within the Order limits required as part of the authorised project, which is not time limited. However, the undertaker would not seek to rely on this right to maintain where a temporary power could, instead, be exercised in order to undertake the necessary works. This is	
			so as to avoid any unnecessary encumbrance being created on the land in perpetuity. A temporary power for maintenance is already included in Article 27, but limited to 5 years. This applies across all land within the	
			Order limits required for the maintenance of the authorised project (and would therefore also include a power to maintain landscaping).  Therefore, by increasing the period for maintenance in Article 27 from 5 years to 10 years (but restricted to NNDC's administrative area and only	
			for the purpose of landscaping), there is no change to the nature or extent of the land or rights which can be acquired under the compulsory acquisition powers already contained in the dDCO at Schedule 6.	
			4. Given that the Applicant has updated Requirement 19 and Article 27(12) to remove the element of landowner consent for the additional 5 years, the six tests (necessary; relevant to planning; relevant to the development to be permitted; enforceable; precise; and reasonable in all	
			other respects) are satisfied.  5 & 6. The Applicant will look to replant trees as close as practicable to	
			the location where removed, which will primarily be at an alternative location within the Order limits but outside of the cable easement.	





PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
			Landowner consent will not therefore be required for planting within the	
			Order limits. Where this is not possible, other locations will be	
			investigated i.e. on land adjacent to the Order limits, subject to	
			agreement with the landowner; or locations in the district (as close of	
			possible to the original location) where landowner agreement for tree	
			planting has been secured. This information will be captured in an update	
			to the OLEMS to be submitted at Deadline 8.	
			North Norfolk District Council will be consulted on the location of	
			replacement planting as part of the approval of the final Landscape	
			Management Scheme, secured under Requirement 18.	
			7. The Applicant considers that this matter is now resolved and this will be	
			updated in the next version of the SoCG with NNDC.	
Q3.5.3.11	The Applicant	Requirement 20: Hydrogeological Risk Assessment for	The Applicant notes this and has addressed in the appropriate Section	
		abstractions within 250m of works:  Note question below in Section Q3.15.0 Water Resources and Flood	below.	
		Risk.		
Q3.5.3.12	The Applicant	Requirement 20: Monitoring of residual adverse impacts on the	The Applicant notes this and has addressed the question in the appropriate	
		water environment:	Section below.	
		Note question below in Section Q3.15.0 Water Resources and Flood Risk.		
Q3.5.3.13	The Applicant	Requirement 20: Refined conceptual site modelling for each	The Applicant notes this and has addressed the question in the appropriate	
		watercourse crossing:	Section below.	
		Note question below in Section Q3.15.0 Water Resources and Flood		
Q3.5.3.14	The Applicant	Risk.  Requirement 20: Risk Assessment based on chemical testing in	The Applicant notes this and has addressed the question in the appropriate	
Q3.3.3.14	те присит	the ground investigation reports:	Section below.	
		Note question below in Section Q3.15.0 Water Resources and		
		Flood Risk.		
Q3.5.3.15	The Applicant	Requirement 20: Consultation on contamination and approval of	The Applicant notes this and has addressed the question in the appropriate Section below.	
		remediation:	Section below.	
		Note question below in Section Q3.15.0 Water Resources and		
		Flood Risk.		
Q3.5.3.16	The Applicant	Requirement 20: OCoCP in relation to Agricultural Private Water	The Applicant notes this and has addressed the question in the appropriate	
		Supplies:	Section below.	
		Note question below in Section Q3.13.3 Land Use and Agriculture.		
Q3.5.3.17	The Applicant	Requirement 20: OCoCP	The Applicant notes this and has addressed the question in the appropriate	
		Note question below in Section Q3.13.2.1 regarding Tourism	Section below.	
		Mitigation Strategy.		
02.5.2.40	The Aralia- at	Bourison and 31. Traffic	The Applicant notes this and has addressed the superior in the same	
Q3.5.3.18	The Applicant	Requirement 21: Traffic	The Applicant notes this and has addressed the question in the appropriate Section below.	
		Note question below in Section Q3.14.1.5 regarding Cumulative	Section below.	
		traffic effects in Cawston.		





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.5.3.19	The Applicant	Requirement 25- definition of secondary consent bodies:  Note question below in Section Q3.15.0 Water Resources and Flood Risk.	The Applicant notes this and has addressed the question in the appropriate Section below.	
Q3.5.3.20	The Applicant	Requirement 25: Attenuation capacity at substations allowance for climate change:  Note question below in Section Q3.15.0 Water Resources and Flood Risk.	The Applicant notes this and has addressed the question in the appropriate Section below.	

#### 5.4 OTHER REQUIREMENTS

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			No questions	

#### 5.5 SCHEDULES 9 to 13: Deemed Marine Licences

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.5.5.21	Marine Management Organisation	DML Schedule 9/10/13 Part 4 Condition 15 (4): The MMO and NE to review the further comments from the Applicant at [REP6-014] on time periods for approvals including in relation to CfD timescales and provide further comments at Deadline 7.	The MMO notes that timescales are linked to the concerns relating to both arbitration and appeals.  Fundamentally, the MMO does not agree with the 4 month timescale and the MMO's position going forward will continue to be that a 6 month timescale is appropriate.  The MMO provided detailed comments in RR-069 section 2.1.13 – 2.1.32 along with the Joint position Statement submitted by the MMO as part of RR-069. The Applicant submitted the joint position paper in Appendix 3 of AS-025.  The MMO has reviewed REP6-014 comments in relation to CfD timelines and understands the Applicant's concerns of delays during the CfD process. However, the MMO believes that this only serves to emphasise the MMO's concerns regarding its ability to sign off documents within 4 months. The MMO considers that 6 months allows a realistic timescale to work through any issues or concerns and also provides the Applicant with a deadline of when a decision would be made.	The Applicant notes this response and refers the ExA and the MMO to its response to WQ3.5.5.1 submitted at Deadline 7 (in REP7-017 and copied above).  The ability for the parties to agree to an extension in writing - as secured by Condition 15(5) (Schedule 9-10), Condition 9(5) (Schedule 11-12), and Condition 7(5) (Schedule 13) - is also considered a pragmatic way to deal with any issues of resource or in the event that a further reasonable amount of time was required to discharge the condition.  The Applicant reiterates its previous position that the MMO and its statutory stakeholders will, under Scenario 1, benefit from efficiency savings and lessons learned in discharging the related Norfolk Vanguard DML conditions.  For the reasons outlined above, and in the related documents referred to in response to WQ3.5.5.1 at Deadline 7 [REP7-017], the Applicant considers that 4 months is an appropriate time period for discharge of DML conditions.
Q3.5.5.21	Natural England	DML Schedule 9/10/13 Part 4 Condition 15 (4): The MMO and NE to review the further comments from the Applicant at [REP6-014] on time periods for approvals including in relation to CfD timescales and provide further comments at Deadline 7.	NE has reviewed the comments made with regard contracts for difference timescales and maintains its position that six months is a more appropriate timescale. Given the wide Rochdale envelope of the project and the remaining uncertainties on the impact to several designated sites it is essential that we have sufficient time to review and discuss this key documentation to ensure the impacts are appropriately mitigated or potentially that compensatory measures are agreed.	The Applicant refers NE to its response to the MMO above as well as to the Applicant's response to WQ3.5.5.1 submitted at Deadline 7 [REP7-017].  The Applicant considers that the outline mitigation plans have been worked-up to a very detailed level; all of which have been subject to scrutiny and 'testing' throughout the examination process. The proposed mitigation is therefore clear and precise. Furthermore, in the majority of cases - particularly for more sensitive matters - the DMLs stipulate that the final plan must be in accordance with the outline/in-principle plan. For instance, the construction programme and monitoring plan at Condition 14(1)(b) (Schedule 9-10) and the offshore operations and maintenance plan at Condition 14(1)(j) must accord with the offshore in principle





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
Number				monitoring plan; the project environmental management plan at Condition 14(1)(d) must accord with the outline project environmental management plan; the scour protection and cable protection plan at Condition 14(1)(e) must accord with the outline scour protection and cable protection plan; the archaeological written scheme of investigation at Condition 14(1)(h) must accord with the outline written scheme of investigation (offshore); and the Site Integrity Plan at Condition 14(1)(m) must accord with the in principle Norfolk Boreas Southern North Sea Special Area of Conservation Site Integrity Plan.  The Applicant also envisages that discussions will be held with the MMO, and NE where relevant, once the final Project design has been agreed and in advance of seeking formal discharge of conditions, which would reduce the need for multiple rounds of consultation post submission. In relation to designated sites, the In Principle SIP (document reference 8.20) contains an indicative timeline for consultation and agreement of the SIP post-consent and includes several rounds of consultation with the MMO prior to the formal submission of the final SIP four months in advance of construction (and six months in the case of the CSIMP). It is expected that other key plans would follow a similar consultation and approval process. Furthermore, it will be in the Applicant's interest to engage the MMO, and NE, at an early stage in this way to ensure the discharge process is as efficient as possible.  Compensation is considered separately and outside of the DML timeframes. The Applicant refers NE to Schedule 19 of the dDCO submitted at Deadline 7 [REP7-004], which states that no later than 12 months prior to the commencement of any offshore works, the compensation scheme/measure/strategy must be submitted to the Secretary of State for
				approval.  For the reasons outlined above, and in the related documents referred to in response to Q3.5.5.1 at Deadline 7 [REP7-017], the Applicant considers that 4 months is an appropriate time period for discharge of DML conditions.
Q3.5.5.1	The Applicant	Prospects for agreement on DML Schedule 9/10/13 Part 4 Condition 15 (4):  It appears unlikely that agreement will be reached between the Applicant, NE and MMO regarding four- or six-month submission periods in Schedule 9/10/13 Part 4 Condition 15 (4).  The Applicant, MMO and NE to provide any additional information to assist the ExA in making its recommendation to the Secretary of State.	The Applicant's position is outlined in its response to Further WQ2.5.5.1 at Deadline 5, contained in the Applicant's Responses to the Examining Authority's Further Written Questions [REP5-045]. The positions are also outlined in the SoCG with the MMO at Table 8 [REP6-029] and at Table 7 of the SoCG with NE [REP6-033].  In summary, the Applicant has followed existing precedent, and has sought to maintain consistency with the approach taken in the East Anglia Three DCO, the Hornsea Project Three draft DCO, the Thanet Extension draft DCO, and the Norfolk Vanguard draft DCO.  In addition, the plans to be submitted under the Norfolk Boreas project	
			are likely to benefit from efficiency savings and lessons learned from the Norfolk Vanguard process. Equally, the stakeholders would be familiar with the general content and structure of the plans for discharge, following the Norfolk Vanguard process. The Applicant considers that these are persuasive points (in addition to those put forward previously) to justify a 4 month period for this particular project, even if other projects have a 6 month period.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			The Applicant is content to let the Secretary of State decide whether to impose a four month or a six month timeframe for discharge; and the Applicant would have nothing further to add on this matter following the close of examination. The Applicant also understands that the MMO are in support of this approach.	
Q3.5.5.1	Marine Management Organisation	Prospects for agreement on DML Schedule 9/10/13 Part 4 Condition 15 (4):  It appears unlikely that agreement will be reached between the Applicant, NE and MMO regarding four- or six-month submission periods in Schedule 9/10/13 Part 4 Condition 15 (4).  The Applicant, MMO and NE to provide any additional information to assist the ExA in making its recommendation to the Secretary of State.	Please see the response to Q3.5.5.21. The MMO provided detailed comments in RR-069 section 2.1.13 – 2.1.32 along with the Joint position Statement submitted by the MMO as part of RR-069. The Applicant submitted the joint position paper in Appendix 3 of AS-025. The MMO believes that there is no need for an appeals process to be included, therefore the condition does not need to include the wording in red below:  Condition 15 (4) No licensed activity may commence until for that licensed activity the MMO has approved in writing any relevant programme, statement, plan, protocol or scheme required to be approved under condition 14 or approval has been given following an appeal in accordance with subparagraph (6).  In addition to the removal of this wording the MMO believes that Condition 15(6) should be removed and Condition 15(7) should be amended to remove wording relating to the appeal process. Part 5 – Appeals process should also be removed. The MMO also understands NE agrees that the timescale should be 6 months.	The Applicant disagrees. The Applicant refers the MMO and the ExA to its response to WQ3.5.5.1 submitted at Deadline 7 [REP7-017], as well as its comments on responses to the MMO and NE under WQ3.5.5.21 above.  In relation to arbitration and appeals, the Applicant has responded to these questions in its Written Summary of the Applicant's Oral Case at Issue Specific Hearing 1 and the Applicant refers the MMO and the ExA to REP1-041. The Applicant has also outlined its response to the concerns in respect of arbitration at RR-069 (row 21) [AS-024].  This topic was also discussed in detail during the Norfolk Vanguard examination and the Norfolk Vanguard applicant agreed a Joint Position Paper with the MMO, which applies equally to the Norfolk Boreas Applicant and the Norfolk Boreas position. This has been submitted to the Norfolk Boreas examination as Appendix 3 to the Applicant's Comments on RRs (document reference ExA.RR.DO.V1 / AS-024). The Applicant considers that consistency in decision making should be applied with respect to arbitration and appeals across the most recent offshore wind farm Orders, in particular between Norfolk Vanguard and Norfolk Boreas.
Q3.5.5.1	Natural England	Prospects for agreement on DML Schedule 9/10/13 Part 4 Condition 15 (4):  It appears unlikely that agreement will be reached between the Applicant, NE and MMO regarding four- or six-month submission periods in Schedule 9/10/13 Part 4 Condition 15 (4).  The Applicant, MMO and NE to provide any additional information to assist the ExA in making its recommendation to the Secretary of State.	Natural England has no further comment to make on this issue. However, maintains its position that a period of six months is needed.	Noted.
Q3.5.5.2	The Applicant	Prospects for agreement on DML Conditions for notice to mariners period and cable laying plan:  Confirm whether agreement is likely to be reached with Trinity House (TH) prior to Deadline 8 and provide any additional information to assist the ExA in making its recommendation to the Secretary of State in regard to matters below remaining to be agreed, as noted in the SoCG [REP6-039], including:  1. The Applicant's request to replace a 10 day period for notice to mariners prior to commencement instead of 14 days [dDCO/DMLs Schedule 9 Part 4 9 (8), Schedule 10 Part 4 9 (8), Schedule 11 Part 4 4 (8), Schedule 12 Part 4 4 (8), Schedule 13 Part 4 3 (8)] to ensure consistency with the draft Norfolk Vanguard DCO.  TH request to add to DML conditions [Schedule 9 Part 4 14 (1)(g)	<ol> <li>It has been agreed with both Trinity House and the Maritime and Coastguard Agency that the condition should remain as per the current draft DCO, with a 10 day notice period for notice to mariners. This is to maintain consistency with the Norfolk Vanguard dDCO including importantly post consent, when it is likely a single marine coordination centre will be responsible for issuing both project notices and therefore variations in notification timescales could lead to errors. This agreement will be reflected in the next revision of the SoCGs to be submitted at Deadline 8.</li> <li>2. 2.This matter remains outstanding however the Applicant is in discussion with Trinity House and the existing condition in the dDCO has been agreed with the Maritime and Coastguard Agency as reflected in the SoCG REP2-049.</li> </ol>	





PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
		Schedule 10 Part 4 14 (1)(g), Schedule 11 Part 4 9(1)(g), Schedule 12 Part 4 9(1)(g), Schedule 13 Part 4 7(1)(f)] suggested text [REP6-039] commencing " a detailed cable laying plan of the Order limits".	The Applicant considers that Trinity House's involvement in cable burial approval is already secured through Schedule 9-10, condition 14(1)(a) and Schedule 11-12, condition 9(1)(a) which cover agreement with the MMO in consultation with Trinity House and the MCA on the length and arrangements of all cables as part of the design plan – this condition also includes the Cable Monitoring and Installation Plan. However, for further clarity, the Applicant is also content to add "and Trinity House" to Condition 15(8) (Schedule 9-10) and Condition 10(8) (Schedule 11-12) as shown below (and this has been included in the dDCO submitted at Deadline 7):	
			No part of the authorised scheme may commence until the MMO, in consultation with the MCA and Trinity House, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the project, adequately addressed MCA recommendations as appropriate to the authorised scheme contained within MGN543 "Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues" and its annexes.	
			The other aspects referred to by Trinity House are also secured in the condition referred to above, through the requirement to address the recommendations of the MCA contained within MGN 543. MGN 543 states:  It should be determined at what depth below the seafloor export cables are buried to ensure there are no changes to charted depths. If burial is not possible, for example due to underwater features and/or seabed ground conditions export cables should be suitably protected such as by rocks or other such suitable mattress placements to mitigate the risks to vessels. Consequently, the MCA would be willing to accept up to 5% reduction in surrounding charted depths referenced to Chart Datum, unless developers are able to demonstrate evidence that any identified risks to any vessel type are satisfactorily mitigated.	
			In drafting the DCO and the DMLs, the Applicant has sought to follow existing precedent unless a change can otherwise be justified, and has sought to avoid unnecessary duplication to ensure consents do not become overly complex or lengthy, and remain clear, consistent and workable. The drafting contained in the DML aligns with the wording in the East Anglia THREE DML, which is the most recent offshore wind farm consent to have been granted. It is also the approach adopted on the draft Order for Thanet Extension and importantly on the Norfolk Vanguard draft DML with which the Applicant wishes to maintain consistency given the sister nature of the two projects.	
Q3.5.5.3	The Applicant	Schedules 9 and 10 Part 4, Conditions 14 (1) (c), (d), (g,) (j), 18, 19, 20 and 22:  Note questions below in Section Q2.6.0 Fishing and Fisheries.	The Applicant notes this and has addressed the question in the appropriate Section below.	
Q3.5.5.4	The Applicant	Schedules 11 and 12 Part 4, Conditions 9 (1) (c), (d), (g,) (j), 13, 14, 15 and 17:  Note questions below in Section Q2.6.0 Fishing and Fisheries.	The Applicant notes this and has addressed the question in the appropriate Section below.	





PINS	ty Together  Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number		Question.	interesteu l'arties Response at Deaume 1.	Applicant's comments
Q3.5.5.5	Natural England	Alternative to Schedule 11 &12 Part 4 Condition 9 (1) (m): The MMO and NE to comment on the alternative condition proposed by the Applicant [REP6-016(ExA.AS-2.D6.V1 Alternative to the Grampian condition for the HHW SAC)] which would secure a Cable Specification, Installation and Monitoring Plan that would contain all of the elements of the HHW SIP, but would not defer the conclusion of AEoI to post consent.	NE has provided comment on the DCO documents within our response at deadline 7.	Noted. The Applicant has responded within the document titled Applicant's Response to Natural England's REP7-045 and REP7-046 (document reference ExA.ASR-NE.D8.V1).
Q3.5.5.5	Marine Management Organisation	Alternative to Schedule 11 &12 Part 4 Condition 9 (1) (m): The MMO and NE to comment on the alternative condition proposed by the Applicant [REP6-016[EXA.AS-2.D6.V1 Alternative to the Grampian condition for the HHW SAC)] which would secure a Cable Specification, Installation and Monitoring Plan that would contain all of the elements of the HHW SIP, but would not defer the conclusion of AEoI to post consent.	The MMO welcomes this condition along with the proposed amendment to Schedule 11 &12 Part 4 Condition 9 (1) (g). However, the MMO still has concerns in relation to the sign off of the document and the potential for the MMO to have to make a decision on AEoI at the post-consenting stage. The MMO stresses that any decision on AEoI as part of an Appropriate Assessment should be made at consenting stage by the SoS and not later down the line when a plan is submitted. The MMO defers to Natural England in relation to HRA matters. The MMO, NE and the Applicant have had further discussions relating to the title of the plan and the wording of the condition.  The MMO believes the plan includes all information that would be required however recommends that the plan is renamed to Cable Specification, Installation, Mitigation and Monitoring Plan.  Discussions will continue and updates will be provided at Deadline 8.	The Applicant refers the MMO and the ExA to its position paper on the HHW SAC [REP5-057], in particular at section 6.  The Applicant initially introduced the HHW SAC SIP together with an associated Grampian condition to address concerns from NE that an AEOI cannot be ruled out at this stage. This was proposed with the aim of providing confidence that there would be no AEoI on the HHW SAC notwithstanding the ephemeral nature of <i>S.spinulosa</i> reef and its potential for recovery within the HHW SAC before cable installation (as a result of fisheries management measures). The MMO and NE had concerns with the Grampian condition associated with the SIP which requires the Applicant to demonstrate that there will be no AEoI on the HHW SAC post consent to the satisfaction of the MMO in consultation with Natural England.  The Applicant is emphatically not proposing to defer an Appropriate Assessment through the use of a Grampian condition. A full Information to support Habitats Regulations Assessment (HRA) Report has been provided with the application [APP-201] which concludes, with no reliance on the Grampian condition, that there is no adverse effect on integrity (AEoI). Whilst it is correct that the final number and precise route of the cable has yet to be determined, the HRA has been undertaken on the basis of a worst case scenario.  Notwithstanding the above, (and whilst the Applicant considers that the Grampian condition and the use of the SIP is appropriate) given that the Applicant is confident that a conclusion of no AEoI can be made preconsent, particularly in light of the mitigation proposed, the Applicant proposed an alternative condition to secure the mitigation for cable installation and cable protection in the HHW SAC through the CSIMP. Again, this requires the Secretary of State (SoS) to be satisfied that there is no AEoI at the consenting stage and does not therefore defer Appropriate Assessment.  In the event that it was considered necessary to undertake a further Appropriate Assessment at the point of d





PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
				before arriving at any determination (i.e. the grant of a Marine Licence) which may have an adverse effect on the integrity of a European site. Accordingly, the Applicant fails to understand why the MMO should be reluctant to undertake what is an integral and usual part of its role as regulator of marine activities.
				In this respect, the MMO raised similar concerns for co-ordinating scheduled piling offshore through the discharge of the Southern North Sea Site Integrity Plan during examination of the East Anglia Three Offshore Wind Farm. The MMO stated that this role should be undertaken by the SoS and not the MMO. The Appropriate Assessment for East Anglia Three conducted by the Secretary of State (dated 7 August 2017) says (our underlining):
				"11.68 In the Applicant's SoCG with the MMO [REP7-021], it was agreed that "condition 13(2) of the relevant DMLs, provide an appropriate framework for approving and securing any mitigation required". However, when making specific comments on the form of mitigation required for incombination impacts, the MMO expressed concern over who would be best placed to regulate scheduled piling across multiple offshore wind farm developments, and suggested that this was a decision to be made by the Secretary of State [REP5-008]. It was the ExA's view, that the MMO, as the regulatory body for marine activities in the seas around England, is the most appropriate body to regulate scheduled piling activities across multiple developments. The Secretary of State agrees with the ExA that the MMO would be the most appropriate body for to regulate scheduled piling activities across multiple developments, should this mitigation measure be required.
				11.69 Based on the evidence presented by all parties, the ExA was satisfied that an AEoI, from the Project in-combination with other plans or projects, could be excluded. This recommendation relied upon the implementation of the MMMP and the SIP post-consent.
				11.70 The Secretary of State has considered the representations made by the Applicant, NE, WDC, TWTs and the recommendation as made by the ExA. The Secretary of State is satisfied that, the potential disturbance and displacement of harbour porpoise as a result of increased noise levels during construction and operation as a result of the Project in-combination with other plans or projects, would not represent an adverse effect upon the integrity of the SNS cSAC. For this conclusion he places particular weight on the mitigation secured in Condition 13(2) of the dMLs in Schedules 10 to 13, which allows for mitigation to be developed, where necessary, in view of confirmed construction methods and finalised guidance from the SNCBs."
				In essence, the MMO as the regulatory body for marine activities is the competent authority for the purposes of undertaking Appropriate





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
				Assessment in the marine environment, and for these reasons the Secretary of State was very clear in the East Anglia Three decision that the MMO is best placed to undertake this role rather than the Secretary of State.
				Whilst this condition could be removed from the DML and included in the DCO, (i.e. as a requirement of the DCO which must be approved by the SoS, rather than a condition of the DML which must be approved by the MMO), the Applicant does not consider this to be a sensible or appropriate approach given the MMO's role and duties as regulator of marine activities.
				Furthermore, no explanation or justification has been provided by the MMO as to why that would be appropriate in this particular case.
Q3.5.5.6	The Applicant	Schedule 13 Part 4, Conditions 7 (1) (c), (d), (g,) (j), 11, 12, 13 and 15:  Note questions below in Section Q2.6.0 Fishing and Fisheries.	The Applicant notes this and has addressed the question in the appropriate Section below.	

## 5.6 SCHEDULE 15: ARBITRATION RULES

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Ques	ion addressed to:			
Num	er			
			No Questions	

#### 5.7 SCHEDULE 16: PROCEDURE FOR DISCHARGE OF REQUIREMENTS

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.5.7.1	The Applicant	Table of requirements, discharge authorities and consultees and discharge process map Should the Timetable of requirements, discharge authorities and consultees and the Discharge process map [REP6-043, Appendix B and Appendix C] be certified documents, referred to in Schedule 16?	<ul> <li>The Applicant does not consider that either of these appendices should be secured in the DCO for the following reasons:</li> <li>Appendix B (Discharge authorities): the Applicant considers it a helpful exercise to outline who within the council will need to be internally consulted before discharging a plan. However, the other relevant planning authorities have not inputted to NNDC's Appendix B and, in any event, securing this detail in the DCO might make the process too rigid and inflexible, when in practice the councils may need to call on other consultees beyond those listed. The Applicant also notes that there are a number of 'TBCs' within the fourth column of the table.</li> <li>Appendix C (Discharge Map): this appendix mirrors the process set out in Schedule 16. It would therefore be unnecessary duplication to secure a map of the same process within the DCO.</li> <li>The Applicant considers that once fully worked up these documents could, instead, form part of the PPA.</li> </ul>	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
Q3.5.7.2	Broadland District Council	Table of requirements, discharge authorities and consultees and discharge process map Provide any comments on NNDC's Timetable of requirements, discharge authorities and consultees and the Discharge process map [REP6-043, Appendix B and Appendix C].	Useful reference and can see no reason why it shouldn't be incorporated into the Requirements of the DCO.	The Applicant does not consider it would be appropriate to secure NNDC's suggestions within Requirement 15. The Applicant refers Broadland District Council to the Applicant's response to WQ3.5.3.1, WQ3.5.3.2, and WQ3.5.3.4 submitted at Deadline 7 [REP7-017].
Q3.5.7.4	The Applicant	Schedule 16 Parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.	The Applicant refers the ExA to its response to Q3.5.7.1 above as well as its previous response to Q2.5.1.5 and Q2.5.7.1 submitted at Deadline 5 [REP5-045] together with its comments on these respective questions submitted at Deadline 6 [REP6-014].  The Applicant discussed this matter with the councils on a conference call on 12 March 2020 and the Applicant understands that the procedure for discharge of Requirements at Schedule 16 is agreed. Whilst Norfolk County Council have raised some concerns in relation to the periods for discharge, Schedule 16 does give sufficient flexibility to agree an appropriate extension to the standard 8 week period under paragraph 1(3)(c) of Schedule 16. Given this, it is considered that the time periods specified strike the right balance to enable discharges within a reasonable and proportionate period.  The Applicant also considers that it is important that the discharge process and timeframes are consistent across both Norfolk Vanguard and Norfolk Boreas. The Schedule 16 discharge process was agreed during the Norfolk Vanguard examination and the Applicant therefore considers that there is benefit for all parties (the Applicant, RPAs, and stakeholders) of ensuring consistency across both projects. The Applicant also refers the ExA to NNDC's response to Q2.5.0.3 at	
Q3.5.7.4	Broadland District Council	Schedule 16	Deadline 5 [REP5-067], which concurs with this position.  No further points to add.	The Applicant notes and welcomes this.
		Parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.		
Q3.5.7.5	The Applicant	Planning Performance Agreements  Provide any update on matters since the response to responses to further written questions provided by the Applicant [REP6-014, responses to Q2.5.7.1].	The Applicant held a productive conference call with the RPAs on 12 March 2020. The Applicant will continue to discuss matters relating to discharge of Requirements and an associated PPA with the RPAs.  The Applicant is also preparing a more detailed note on PPAs for the RPAs. This will set out a further explanation on what the PPA could cover – including reference to a programme and timetable for liaison between the Applicant and the RPAs (as explained further in answer to Q3.5.3.2 above).	
Q3.5.7.5	Broadland District Council	Planning Performance Agreements Provide any update on matters since the response to responses to further written questions provided by the Applicant [REP6-014, responses to Q2.5.7.1].	Initial discussion held with representatives of the applicant and officers of the Districts and County Council in respect of the mechanism and requirements of Planning Performance Agreements (PPAs). Further information to be provided by the applicant for review by the Districts and County Council to enable agreement on the most effective use of PPAs and how to ensure comments from consultees can be received in a timely manner.	The Applicant concurs with this position.





#### 5.8 SCHEDULE 17: PROTECTIVE PROVISIONS

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
Q3.5.8.6	The Applicant	dDCO Schedule 17 paragraph 71(3) (c): security for consent for additional water volume and additional cost recovery under IDB Byelaws: With reference to the 'reasonable requirements' of Schedule 17 paragraph 71 (3) (c), respond in detail to the Water Management Alliance (WMA) [REP5-057] request for assurance how Schedule 17 secures safeguarding of the provisions of Byelaws 3 and 28 of the Broads 2006 Internal Drainage Board and the Norfolk Rivers Internal Drainage Board for consent to any increase in total volume of water to enter the Internal Drainage District and partial recovery of additional costs incurred by the WMA Member Board resulting from additional flows so consented.	he Applicant acknowledges the concerns raised by the WMA (in their Deadline 6 submission (REP6-057)). In short, the Applicant considers that the WMA Byelaws 3 and 28 are covered by the Protective Provisions in 'Schedule 17 Part 7, For the Protection of the Environment Agency and drainage authorities' (as outlined further below). The Applicant has provided this explanation to the WMA and they have subsequently responded to state:  We are encouraged by your confirmation that in paragraph 71(2)(c) "reasonable requirements" is broad enough to cover Byelaw 28 and thus could include the charging of Surface Water Development Contributions among other things. In order to fully assuage our concerns, we request that you consider a slight modification to the definition of 'specified work' within paragraph 70(3)(c) so that it reads as follows:  "affect any drainage work or the total volume or volumetric rate of flow of water in or flowing to or from any drainage work;"  This alteration, together with your assurances of the broad scope of 71 and 72 would give us confidence that the provisions of these specific Byelaws are safeguarded within Schedule 17.  The Applicant is content to adopt the proposed change and this is secured in the updated draft DCO submitted at Deadline 7 (document reference 3.1 (version 6)). The Applicant understands that this matter is therefore agreed.  For completeness, the Applicant considers that:  Impacts as a result of increases in total volume of water entering the Internal Drainage District (as dealt with at Byelaw 3) are covered by paragraph 72 of the protective provisions, which provides that the 1DB must be in no worse a position as a result of the works and that the developer must carry out protective works to ensure that efficiency for flood defence purposes is not impaired, and the risk of flooding (amongst other matters) is not increased.  In addition, the Applicant considers that the provisions of Byelaw 3 (as referred to above) are also covered by paragraph 71(3)(c) of the protective p	
			authorised development, or any sewers, drains or watercourses.	
Q3.5.8.7	The Applicant	Provide an update on discussions with the EA over protective provisions. Has agreement been reached? If not, provide any additional information to assist the ExA in making its recommendation to the SoS.	The Applicant refers the ExA to the Applicant's comments on the EA's response to Q2.3.0.29, submitted at Deadline 6 [REP6- 014]. The Applicant has held further discussions with the EA in order to explain its position, but the parties have not yet been able to come to an agreed position.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			The Applicant considers that the timeframe within the protective provisions at Schedule 17, Part 7 - together with a deemed discharge mechanism - is appropriate and proportionate in order to unlock nationally significant infrastructure development projects in a timely manner.  In summary, the Applicant has followed existing precedent, and has sought to maintain consistency with Hornsea Project Two, Triton Knoll, Hornsea Project Three and, in particular, Norfolk Vanguard. This is of particular importance in the case of consistency with the Norfolk Vanguard dDCO in which it is likely that a coordinated approach for the discharge of requirements would be adopted. Accordingly, variations in the timetable for post-consent approvals could lead to confusion and error.	
Q3.5.8.7	Environment Agency	Provide an update on discussions with the EA over protective provisions. Has agreement been reached? If not, provide any additional information to assist the ExA in making its recommendation to the SoS.	There is one matter on which agreement has not yet been made. This is the presumption of deemed consent.  The Environment Agency's position is that deemed refusal is required and is not negotiable. The protective provisions effectively replicate the provisions within the Environmental Permitting (England and Wales) Regulations 2016 and so should be consistent with them.  See for example, the decision on M20 Junction 10A DCO where the view was taken that drafting protective provisions should reflect the contemporary statutory provisions	The Applicant notes this response. However the Applicant considers that offshore wind nationally significant infrastructure is materially different to a highways DCO; in particular with respect to the national need for renewable energy generation coupled with the requirements placed on an offshore wind developer to meet competitive CfD milestones. The Applicant therefore requires the programme certainty from a prescribed time period. The Applicant considers that the offshore wind precedent referred to in the Applicant's response to WQ3.5.8.7 submitted at Deadline 7 [REP7-017] is more applicable to the current project and the Applicant considers that consistency should be adopted across all offshore wind decisions in this respect.

## 5.9 CONSENTS, LICENCES AND OTHER AGREEMENTS

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7: Applicant's Comments	
			No Questions	

# 6 Fishing and fisheries

# 6.0 Fishing and fisheries

PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.6.0.2	The Applicant	Export cable siting restrictions in relation to MPA Byelaw Restricted Area 36: Provide update on whether agreement with Eastern IFCA is likely to be reached by Deadline 8 on export cable route restrictions in relation to MPA Byelaw Restricted Area 36 and confirm the Applicant's final position if agreement is not reached.	Due to the fact that EIFCA byelaw Area 36 overlaps more than half the width of the Norfolk Boreas offshore cable corridor it is unlikely that the Applicant will be able to commit to avoiding installation of export cables within Area 36 in its entirety at this stage. Therefore, it is unlikely that agreement will be reached on this point within the examination. However, it may be possible to commit to avoid Area 36 during the detailed design phase once the extent of Annex I <i>S. spinulosa</i> reef in this location is known.	
			The Applicant's final position (during the examination) is therefore as follows:	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			The Applicant has committed to avoiding Annex I <i>S.spinulosa</i> where possible when cable routing, and this would include within Area 36. The Applicant has also committed to not installing cable protection within the priority areas to be managed as <i>S.spinulosa</i> reef. One of these priority areas occupies a large proportion of Area 36 and thus there would be no habitat loss as a result of cable protection in this area. The Applicant is therefore confident that with this mitigation Annex I <i>S.spinulosa</i> reef within Area 36 would not be adversely affected by the project nor would the project inhibit the ability of reef to restore in the areas where Natural England have the highest confidence that this is possible.  Importantly, the Applicant does not believe that a commitment to exclude cable installation in Area 36 at this stage is an appropriate mitigation measure. This is because if Annex I <i>S.spinulosa</i> reef were to be present at the time of construction to the south of Area 36 and not within it, the Applicant may be required to avoid an area with no reef to the detriment of an area which contained actual reef.  The Applicant also considers that a one-off activity of installing a cable within Area 36 would be significantly different to the repeated and spatially more extensive activity of bottom-towed fishing (which the byelaw for Area 36 has been principally designed and would be implemented to prevent). Therefore, whilst it is appropriate to exclude certain fishing activity, it is not appropriate to extend this to exclude cable installation.  In summary, the Applicant does not expect to reach agreement with EIFCA on this issue during the Examination period. However, the Applicant will maintain the existing good working relationship with EIFCA, with the intention to engage on the potential to avoid Area 36 during the detailed	
Q3.6.0.3	The Applicant	Matters not yet agreed with NFFO/Visned:  Provide an update on whether any further agreement with NFFO/VisNed is likely to be reached by Deadline 8 on the following matters of disagreement recorded in the SoCG at Deadline 6, and if agreement is not reached, what the Applicant's final position is:  1. assessment of impact by subgroupings of vessels; 2. spacing between structures to facilitate resumption of fishing activity; 3. effects of 500m safety zones around Service Operation Vehicles (SOV) for maintenance activities; 4. gear snagging risk mitigation including notification of shallow burial of cables when discovered; 5. cumulative impact assessment of losses of fishing activity in relation to assumptions on resumption of towed gear fishing activities.	Applicant's Update on Progress on the SoCG  In the context of the progress made to date in respect of the Statement of Common Grounds (SoCG) with the National Federation of Fishermen's Organisations (NFFO) and VisNed submitted at Deadline 2 and Deadline 6 (REP2-043 and REP6 -031), it is important to note that, as the starting point, the SoCG was drafted incorporating the previous matters agreed during the examination phase of Norfolk Vanguard.  As such, the SoCG takes account of specific issues raised during consultation undertaken in respect of Norfolk Boreas as well as previous discussions on matters agreed with VisNed/the NFFO during the examination phase of Norfolk Vanguard.  Matters agreed during the examination of Norfolk Vanguard together with additional matters agreed during post-application consultation for Norfolk Boreas are outlined in Table 2.1 of the SoCG and include the following:  • The baseline characterisation;	





Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number			<ul> <li>The impacts included for assessment;</li> <li>The improvement to the worst-case scenario in respect of fishing associated with the removal of 9MW turbines and of floating foundations from the design envelope;</li> <li>Communication with regards to the establishment of safety zones and protocols for the relocation of static gear and the provision of detail on these matters in the Fisheries Liaison and Co-Existence Plan (FLCP);</li> <li>Adherence to Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW) guidance, including in relation to the establishment of suitable arrangements for attributable gear damage;</li> <li>Consideration of reburial approaches or back filling in the first instance as a way of avoiding the need for new areas of cable protection; and</li> <li>Consideration of options which minimise potential for snagging risk where cable protection is proposed.</li> <li>In addition to the matters agreed above, since the submission of the Environmental Statement (ES) the project design parameters have been reviewed and the 10MW and 11MW turbine options are no longer being considered, with the smallest turbine option currently proposed being 11.55MW. This would result in a reduction in the worst-case maximum number of turbines from 180 (10MW option) to 158 (11.55MW option). There would also be an increase of 80m in the minimum spacing between turbines (from 720m to 800m) and in the width of corridor left clear of infrastructure (from 650m to 730m) associated with this change in project design envelope.</li> <li>The SoCG with the NFFO/VisNed was updated at Deadline 6 (REP6 -031) to refer to this update to the project design envelope under both the Applicant's and NFFO/VisNed's positions. Whilst the changes proposed have not resulted in a material change to the positions in respect of the outstanding matters on which the Applicant and the NFFO/VisNed support different views, they do result in an improvement to the worst-case scenario parameters in respect</li></ul>	





Enhancing Society		Overskiens	Interested Destinal Description of Deadline 7.	Auglicantic Comments
PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number	addressed to.			
			reference 6.1.6 ADD (210) and the methodology used for assessment of	
			reference 6.1.6, APP -219) and the methodology used for assessment of commercial fisheries for other projects, including Norfolk Vanguard.	
			commercial hisheries for other projects, including Norrolk variguard.	
			Fisheries receptors are identified by national fleet and fishing method, in	
			line with available fisheries data. Consequently, the impact assessment is	
			undertaken on that basis, using standard receptor sub-groupings (i.e. in	
			line with those used by the relevant national fisheries data agencies to	
			collect information on fishing activity). As noted in Chapter 14	
			Commercial Fisheries, due to data limitations, it is beyond the scope of	
			the EIA to assess impacts on individual vessels. It is however recognised that the level and distribution of fishing activity and dependence on	
			fishing grounds within the offshore project area will vary between	
			individual vessels within the onshore project area will vary between	
			marriada vesseis within the same neets.	
			It is the Applicant's final position that this methodology is appropriate for	
			the assessment of impacts on commercial fisheries receptors.	
			2. Spacing between turbines to facilitate resumption of fishing activity	
			2. Spacing between turbines to facilitate resumption of fishing activity	
			The minimum spacing between turbines (and associated corridors clear of	
			infrastructure within which fishing can resume) has increased as a result	
			of changes in the project design envelope throughout the application and	
			examination process starting at 680m (on floating foundations, which	
			were removed from the design envelope at the ES stage) at the	
			Preliminary Environmental Information Report (PEIR) stage and increasing	
			to 720m (on tetrabase foundations- representing the worst case for	
			commercial fisheries receptors) in the assessment presented in the ES, to	
			a final worst case scenario spacing of 800m (on tetrabase foundations) after the recent removal of the 10MW and 11MW turbine options from	
			the design envelope.	
			the design envelope.	
			It is the Applicant's final position that the minimum worst case spacing	
			proposed is sufficient to make fishing viable between turbines for Dutch	
			and Anglo Dutch beam trawlers. In this context it is important to note that	
			the minimum spacing proposed by Norfolk Boreas is in line with that	
			previously assessed by other projects in the region, including East Anglia	
			One and East Anglia Three <sup>2</sup> . For these projects, the NFFO/VisNed stated in	
			their SoCGs that the spacing proposed would be sufficient to allow fishing	
			to resume within the operational sites in safe conditions.	
			It is also important to note that there is currently no legislation in the UK	
			preventing fishing from occurring within wind farms and that the level of	
			fishing activity which may resume within operational sites will therefore	
			largely depend on the perception of individual skippers with regard to	
			operating fishing gear in offshore wind farm projects.	
			With the above in mind, under the assessment of loss of grounds in	
			respect of beam trawling by Anglo-Dutch and Dutch vessels, impact	
			magnitude was considered to range from low to medium, depending on	
			the level of activity that may resume within the Norfolk Boreas Site (low	

<sup>&</sup>lt;sup>2</sup> Minimum spacing between turbines considered for East Anglia ONE was 625 (within rows) and 850 (between rows) (assuming 50 m operational safety zones would be in place); minimum spacing considered for East Anglia THREE was 675m within rows and 900m between rows (assuming 50m operational safety zones would be in place).





Enhancing Society				
PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
	addressed to:			
Number				
			where skippers resume fishing in the Norfolk Boreas Site and medium	
			where skippers elect not to fish within the Norfolk Boreas Site).	
			· · ·	
			In the case of seine netting, the assessment considered that, under the	
			worst-case design parameters, there was little potential for activity to be	
			able to resume within the Norfolk Boreas site. Therefore, the worst-case	
			assumption taken for assessment was that seine netting will not be	
			undertaken within the Norfolk Boreas Site during operation.	
			3. Effects of 500m safety zones around Service Operation Vehicles (SOV)	
			for maintenance activities	
			101 Humcenance activities	
			As noted in the Applicant's Comments on Written Representations (REP3-	
			007), the worst-case scenario presented in Chapter 14 Commercial	
			Fisheries makes reference to the implementation of 500m safety zones	
			during operation associated with major maintenance works. These are as	
			defined in Part 1, Regulation 2 of the Electricity (Offshore Generating	
			Stations) (Safety Zones) (Application Procedures and Control Access)	
			Regulations 2007.	
			As described in the SoCG with the MCA, safety zones triggered by the use	
			of SOVs during major maintenance are currently not supported by the MCA	
			and a case would need to be included and considered as part of the safety	
			zone application phase post consent, should the Applicant consider using	
			this type of vessel.	
			In the context of this assessment it is important to note that any loss of	
			grounds associated with safety zones during the operational phase	
			(whether those associated with major maintenance works or with the use	
			of SOVs may these be required) would be localised and affect a given	
			discrete area over a short period of time.	
			4. Gear snagging risk mitigation including notification of shallow burial of	
			cables when discovered	
			The Applicant's final position is that the Deemed Marine Licence (DML)	
			conditions and the provisions made in the Outline Fisheries Liaison and	
			Co-existence Plan (Document reference 8.19, APP-710) are appropriate to	
			minimise potential snagging risk.	
			Measures proposed by the Applicant (and secured through consent	
			conditions) which are of relevance with regards to minimising potential	
			for snagging risks are outlined below:	
			The Scour Protection and Cable Protection Plan required under	
			the draft DCO Schedules 9 and 10 (Part 4 Condition 14(1)(e)) of	
			the Generation Assets Deemed Marine Licences (DMLs),	
			Schedules 11 and 12 (Part 4 Condition 9(1)(e)) of the	
			Transmission DMLs and Schedule 13 of the Interconnector assets	
			DML (Part 4 Condition 7(1)(e)) in accordance with the Outline	
			Scour Protection and Cable Protection Plan (Document reference	
			8.16, APP-707), must be approved by the MMO prior to	
			construction. This document will be updated as the final design	
			of the project develops and will include justification of the	
			of the project develops and will include justification of the	





PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
Trumber			location, type, volume and area of cable protection, based on crossing agreements and pre-construction survey data to ensure only essential cable protection can be installed.	
			<ul> <li>Condition 14(1)(e) of Schedule 9 and 10, Condition 9(1)(e) of Schedule 11 and 12 and Condition 7(1)(e) of Schedule 13 require that prior to commencement of licensed activities "details of the need, type, sources, quantity and installation methods for scour protection and cable (including fibre optic cable) protection" must be approved by the MMO.</li> </ul>	
			<ul> <li>Production of the Cable Specification, Installation, and Monitoring Plan (to be agreed with the MMO pursuant to Condition 14(1)(g) (Schedules 9 and 10), Condition 9 (1) (g)(Schedules 11 and 12) and Condition 7(1)(f) (Schedule 13) must include: (ii) a detailed cable (including fibre optic cable) laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques, including cable landfall and cable protection measures; (iii) proposals for monitoring offshore cables including cable protection during the operational lifetime of the authorised scheme which includes a risk based approach to the management of unburied or shallow buried cables.</li> </ul>	
			<ul> <li>Dropped objects will be reported to the MMO using the Dropped Object Procedures Form outlined in Schedules 9 and 10, Part 4, Condition 12 (10), and Schedules 11 and 12, Part 4, Condition 7 (11) and Schedule 13, Part 4, Condition 5 (10).</li> </ul>	
			Co-existence procedures noted in the Outline FLCP of relevance in the context of minimising snagging risk include:	
			<ul> <li>Regular and routine communications with the fishing industry;</li> <li>Early provision of construction and cable laying plans, including location and methods for cable protection, if required;</li> <li>Consideration for the use of guard vessels;</li> <li>Development of a fisheries guidance document to reduce interactions with fishing activity and provide response procedures;</li> <li>Cable burial monitoring;</li> <li>Provision of procedures for the safe recovery of lost or snagged fishing gear; and</li> <li>Appropriate communication with the fishing industry in the event that cables become unburied during the operational phase (i.e. through the Fisheries Liaison Officer (FLO) and appropriate channels such as the Kingfisher Information Service). This has been reflected in the draft DCO under Schedule 9 and 10, Part 4, condition 9 (12) and Schedule 11 -12, Part 4 condition 4 (12). The Applicant considers that the wording included in the draft DCO is appropriate. This is also aligned with the wording recently agreed.</li> </ul>	
			appropriate. This is also aligned with the wording recently agreed with the Maritime and Coastguard Authority (MCA) for the Norfolk Vanguard project.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			5. Cumulative impact assessment of losses of fishing activity in relation to assumptions on resumption of towed gear fishing activities  As outlined in the SoCG with NFFO/VisNed, with regards to access to fishing within wind farm sites, in general terms the cumulative assessment presented in Chapter 14 Commercial Fisheries notes that fishing would be able to resume within operational wind farm sites with the exception of projects in countries where fishing within wind farms is prohibited. In the case of seine netting, the assumption is made that given the dimensions of the gear used, it would be highly unlikely for this method to resume in operational sites, regardless of whether or not fishing is permitted within wind farm arrays.  Consideration was also given in the cumulative assessment to proposals for closed areas to fishing associated with Marine Protected Areas (MPAs) and closures associated with measures implemented under the Marine Strategy Framework Directive (MSFD), an aspect raised by the NFFO/VisNed during consultation both for Norfolk Boreas and Norfolk Vanguard. Loss of grounds associated with these measures would be permanent for affected fishing methods. This was accounted for in the cumulative assessment.  As noted above in respect of the assessment of the project alone, in the context of the cumulative assessment it is also important to note that there is currently no legislation in the UK preventing fishing from occurring within operational wind farms. The level of fishing activity which may resume within operational sites will therefore largely depend on the perception of individual skippers with regard to operating fishing gear within wind farms. It is also important to note that the current trend in the offshore wind farm industry is for the use of large turbines (i.e. 10MW plus). These will require the application of increasingly wider minimum spacings and therefore facilitate fishing activity within operational sites.	

### **7** Grid connection

# 7.0 Grid connection

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.7.0.1	The Applicant	Offshore Ring Main (ORM): Further to the written question [REP5-045, ExQ2.7.0.1], respond to the specific point regarding any consideration given to include options for any future connection into an ORM.	Whilst the undertaking in Ofgem's recent "decarbonisation programme action plan" is noted, this does not change the Applicant's position as set out in responses to previous representations on the subject of a potential east coast grid reinforcement (colloquially referred to as a single option: Offshore Ring Main, or ORM). The Applicant and a number of other developers are engaging on this issue, as part of the Offshore Wind Industry Council. However this workstream is in its very early stages, with a long way to go before concrete proposals are considered sufficiently evolved for an optioneering process, and appropriate solution(s) proposed for consent. As the infrastructure seeking to serve multiple	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			developments would undoubtedly require a Development Consent Order	
			under the NSIP process, the consenting process can be expected to take	
			several years in itself. In parallel to the technical / environmental	
			considerations, regulatory and legal reforms are also required. The	
			expected construction time-frame for Norfolk Vanguard and Norfolk	
			Boreas, if both are consented, or for Norfolk Boreas alone is between	
			2022 and 2028, with first power generated in 2026. Therefore, it is simply	
			not feasible that a large scale offshore grid reinforcement serving multiple	
			projects can be implemented in time to facilitate connection of Norfolk	
			Boreas (or Norfolk Vanguard) to the GB transmission system in order to	
			meet the UKs energy demand profile. Accordingly, it is not appropriate or	
			necessary to include options for Norfolk Boreas to connect into an ORM in	
			the future. In any event, it is not possible to even consider potential	
			options given the very early stage of the ORM, especially bearing in mind	
			the advanced stage of the examination process which the Norfolk Boreas	
			project has reached.	
			The Applicant notes that beyond the current projects in development,	
			The Crown Estate R4 leasing process is considering further development	
			in the southern north sea. Furthermore, beyond the government's target	
			of 40GW by 2030, the Committee on Climate Change recommend further	
			development of offshore wind after 2030 – putting in place 75GW by	
			2050 to achieve net zero. To achieve this considerable step-up in installed	
			capacity, the current annual rate of offshore wind deployment will have	
			to double in the second half of this decade. It is these next round of	
			projects and their successors that the Applicant and the Sector as a	
			whole, sees the work of Ofgem, NG and OWIC enabling.	

# 8 Habitats Regulation Assessment

#### 8.0 River Wensum SAC

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:  Applicant's Comments
Question	Question is addressed to:		
Number			
			No Questions

# 8.1 Norfolk Valley Fens SAC

	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			No Questions	





#### 8.2 Southern North Sea SAC

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.8.2.1	Marine Management Organisation	Discussions with Regulators Group:  MMO to provide further details of discussions with Regulators Group [REP6-045], to include:  1. How the management tool will work in practice?  2. Is it a tool just for an in-combination assessment to be undertaken or for MMO to use for the actual management of various activities?  3. When will this be finalised?	<ol> <li>All regulators (MMO, MOD, and OPRED) will input data into the tool with timetables and spatial impacts of noise generating activities in the SNS.</li> <li>The tool is intended to be used for the management of noise generating activities in the SNS SAC. In addition to this the data is intended to be made publicly available to inform shadow Habitat regulation assessments (HRAs) submitted by developers.</li> <li>Work on the tool is progressing well, however the hosting of the tool and a number of other issues are subject to funding applications which have yet to be secured. The MMO is continuing to be part of the monthly regulators group to discuss and progress work forward and to manage noise-generating activities as applications come in in the short term. The MMO will continue to provide updates where available throughout examination.</li> </ol>	The Applicant welcomes the progress made and will continue working closely with the MMO to understand how construction impacts from other developments will relate to construction of the Norfolk Boreas project so that the mitigation in the SNS SIP can be refined accordingly post consent.

# 8.3 Hasiborough, Hammond and Winterton SAC

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.8.3.1	The Applicant	Alternative to the Site Integrity Plan:  The Applicant has proposed an alternative Cable Specification, Installation and Monitoring Plan (CSIMP) to the SIP [REP6-016] to address the concerns expressed by NE and MMO throughout the Examination. The Applicant to explain:  1. The Applicant has submitted the SAC position paper [REP6-016] which contains new mitigation commitments and the CSIMP as an Appendix. The SAC position paper is referred to in the updated SIP [REP6-011], but not in the dDCO itself. How would the CSIMP therefore be certified and secured?	As explained in Section 6 of the HHW SAC position paper [REP5-057] an alternative condition 9(1) (m) would be included within the DCO:  (m) A cable specification, installation and monitoring plan for the installation and protection of cables within the Haisborough, Hammond and Winterton Special Area of Conservation which accords with the principles set out in the outline Norfolk Boreas Haisborough, Hammond and Winterton Special Area of Conservation Cable Specification, Installation and Monitoring Plan such plan to be submitted to the MMO (in consultation with the relevant statutory nature conservation body) at least six months prior to commencement of licensed activities."  The following amendment to condition 9(1)(g) is also proposed to clarify that the Cable Specification, Installation and Monitoring Plan referred to in condition 9(1)(g) applies outside of the HHW SAC only:  "9(1) The licensed activities or any part of those activities must not commence until the following (as relevant to that part) have been submitted to and approved in writing by the MMO (g) A cable specification, installation and monitoring plan for the installation and protection of cables outside of the Haisborough, Hammond and Winterton Special Area of Conservation, to include  The two alternative conditions; one securing the Site Integrity Plan (SIP) and one securing the Cable Specification Installation and Monitoring Plan (CSIMP), will both be included within the next version of the draft DCO (to be submitted at Deadline 7), such that if the SoS determines that development consent can be granted, the SoS can also chose which condition and associated control document to secure in the DCO.  Annex 1 of the Applicant's Additional information for the HHW SAC	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
			position paper contains the proposed Outline Norfolk Boreas HHW SAC CSIMP [REP6-017] and it would be this document which would be secured (and certified as document 8.20) if the SoS decides to include the alternative condition 9 (1)(m).	
Q3.8.3.2	Natural England	Alternative to the Site Integrity Plan: All IPs to provide any additional information regarding the CSIMP or SIP that will assist the ExA in making its recommendation to the SoS.	Please see NE's Detailed response as submitted at Deadline 7	The Applicant has provided a separate response (submitted at Deadline 8) to Natural England's comments on the Applicant's Haisborough Hammond and Winterton SAC Position Paper in the Applicant's comments on Deadline 7 submissions [ExA.ASR.D8.V1]
Q3.8.3.2	Marine Management Organisation	Alternative to the Site Integrity Plan: All IPs to provide any additional information regarding the CSIMP or SIP that will assist the ExA in making its recommendation to the SoS.	The MMO understands there is still disagreement regarding adverse effect on Integrity (AEoI) between the Applicant and Natural England (NE).  The MMO emphasises that while the MMO defers to NE on these matters, the MMO still strongly believes that a decision should be made on AEoI at consenting stage and supports NE's position.  The MMO welcomes the applicants proposed alternative Cable Specification and Implementation	made at the consenting stage. As set out in the Applicant's Position paper [REP5-057] the HHW SAC SIP was designed to allow a conclusion of no AEoI at the consenting stage, with the assurance through the "Grampian Condition" that the project would only proceed in such a way that the MMO (and Natural England) would be satisfied that it
Q3.8.3.3	The Applicant	Cable Specification, Installation and Monitoring Plan:  The Applicant [REP6-019] commits to decommission cable protection at the end of the Norfolk Boreas project life. If Sabellaria spinulosa colonised over the cable during operation:  1. Is there the potential that removing cable protection could result in more damage than leaving it in-situ?  2. Should there be some flexibility in the CSIMP for removal to take place unless discussion with the relevant SNCB conclude otherwise?	As stated by Natural England throughout the examination (for example Appendix 2.1 of their Relevant Representation [RR-099], they do not consider <i>S.spinulosa</i> reef which has colonised artificial substrate as being Annex I reef. The Applicant has made the commitment to decommission the cable protection to allow for <i>S.spinulosa</i> reef to recolonise natural substrate once the cable protection has been decommissioned. During discussions with Natural England by both the Norfolk Boreas and Norfolk Vanguard projects, Natural England have, in principle welcomed a commitment such as the one that has been made:  1. The Applicant considers that there is a strong likelihood that the cable protection would be colonised by <i>S.spinulosa</i> to such an extent that it could be considered reef. This position is made clear within the Information to Support HRA Report [APP-201].  Two important requirements for <i>S.spinulosa</i> reef to establish are a stable substrate on which the larvae can settle and start to grow and enough suspended sediment to construct their tubes. These requirements would both be met by the cable installation process as the cable protection, where used, would provide a stable substrate and the cable installation process would locally increase the levels of suspended sediment providing the species with additional tube building material aiding the reef building processes. It is therefore likely that at least some of the cable protection would be colonised.  It should be noted that the largest Area to managed as Annex I <i>S.spinulosa</i> reef (identified by Natural England) shown in Figure 5.1 of the HHW SAC SIP [REP6-011] which is also an area that Natural England	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number				
			have the "highest confidence" that reef can occur within it (shown in dark Purple in Figure 5.1) overlaps with the Bacton to Baird Pipeline, the Bacton to Zeebrugge pipeline and an active telecommunications cable. Although there is no direct evidence that reef has established on these features, as none of them have been surveyed for the presence of <i>S.spinulosa</i> reef it does indicate that the local environmental conditions allow <i>S.spinulosa</i> reef to occur where infrastructure exists, thus providing further evidence for the Applicant's assertion that the cable protection will be colonised.  However given Natural England's position as stated above, removal of the cable protection and reef which has established on it during Norfolk Boreas decommissioning could allow the possible establishment of	
			S.spinulosa reef on underlying natural substrate and thus would be accepted by Natural England as Annex I reef which would contribute to the conservation objectives of the HHW SAC.	
			2. Notwithstanding this and should Natural England agree, the wording of the commitment could be updated to read (suggested additional text is underlined):  Norfolk Boreas commit to decommission cable protection at the end of	
			the Norfolk Boreas project life where it is associated with unburied cables due to ground conditions (where required for crossings this will be left in situ) should it be agreed with Natural England and the MMO that this is compliant with the conservation objectives of the HHW SAC.	
Q3.8.3.3	Natural England	Cable Specification, Installation and Monitoring Plan:  The Applicant [REP6-019] commits to decommission cable protection at the end of the Norfolk Boreas project life. If Sabellaria spinulosa colonised over the cable during operation:  1. Is there the potential that removing cable protection could result in more damage than leaving it in-situ?  2. Should there be some flexibility in the CSIMP for removal to take place unless discussion with the relevant SNCB conclude otherwise?	<ul> <li>Please see NE's detailed response as submitted at Deadline 7, in response to Applicants HHW SAC position paper D6. Natural England reiterates that the current SNCB view is that Sabellaria spinulosa on artificial substrata and not substrate which it was designated to be on is not adding to the favourable condition on the habitat.</li> <li>1. However, it is recognised that decommissioning cable protection could have wider impacts and be damaging to Annex I features in its own right.</li> <li>2. It is appropriate for there to be some flexibility unless it is considered to be a necessary mitigation measure to remove AEol. Given the uncertainties in relation to decommissioning cable protection this could be a moot point. Furthermore it should be noted that a new EIA and application would need to be presented at the time of decommissioning the flexibility may not be required as it would be considered again as part of that application.</li> </ul>	The Applicant agrees with Natural England that an assessment would be completed at the time of decommissioning in consultation with the MMO and Natural England and the most favourable option for causing the least effect on the HHW SAC would be taken forward.  The Applicant notes Natural England's suggestion that flexibility may be appropriate and await Natural England's opinion on the suggested additional text underlined in the Applicant's response to Q3.8.3.3 above.
Q3.8.3.4	The Applicant	Alternative Cable Routes: The Applicant has in its Position Paper on Derogation [REP6-025] addressed alternatives for the project. Can the Applicant explain if there are alternatives for the marine cable route to be routed around the SAC to avoid impacts altogether?	The Applicant has considered possible routes to avoid the Haisborough Hammond and Winterton SAC altogether; however these are not feasible for the reasons set out below.  Any route to the North of the HHW SAC would also be restricted by the North Norfolk Sandbanks and Saturn Reef SAC, which like the HHW SAC is designated for Annex I Sandbanks and <i>S.spinulosa</i> reef. As can been seen in Figure 4.2 Offshore constraints [APP-249] of the Environmental Statement (ES) the HHW and North Norfolk Sandbanks and Saturn Reef	





PINS	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number				
Number			SACs form a barrier with only a narrow gap of less than 1km between them. Also in this area there is a significant amount of oil and gas infrastructure including surface and subsurface infrastructure and pipelines. Much of this infrastructure would represent a hard constraint to the project and a route through this would not be possible. Furthermore, to the north of Happisburgh lies the Cromer Shoal Chalk Beds MCZ (Figure 4.2 Offshore constraints [APP-249] of the ES). This was identified as a hard constraint during the site selection process, with many stakeholders (including Natural England, the MMO, The Wildlife Trusts and EIFCA) strongly advising the project to avoid this site. It should be noted that similar advice was not provided for the HHW SAC. The Applicant heeded this advice and from an early stage in the site selection process and the MCZ was avoided.  During the site selection process, a route which would pass to the south of the HHW SAC and make landfall in the Lowestoft area was assessed, see section 4.7 of Chapter 4 Site Selection and Assessment of Alternatives [APP-217] of the ES (also see Figure 4.1 in the Applicant's In principle Habitats Regulations Derogation Provision of Evidence [ExA.Dero.1.D7.V1]). This route was ruled out as it would be considerably longer than the other routes considered, as well as being more complex, requiring approximately double the number of cable/pipeline crossing agreements than that of the proposed offshore cable corridor to Happisburgh South. In addition, the reason that the aforementioned route south of the HHW SAC was required to make landfall as far south as Lowestoft is because there is a significant area of active aggregate dredging located immediately to the south of the southernmost boundary of the SAC, see Figure 4.1 in the Applicants Habitats In principle Habitats Regulations Derogation Provision of Evidence [ExA.Dero.1.D7.V1]). Aggregate dredging areas are considered a hard constraint as the installation of cables would not be permitted within a licen	
			in that area and any route to the south would not be possible due to a large area used for aggregate extraction.	
Q3.8.3.5	The Applicant	Relationship of historic environment, sandbank and reef features in SAC:  The Clarification note on optimising cable routeing through the HHW SAC [REP4-022] provides an overlay plan of Archaeological Exclusion Zones (AEZs), A2 seabed anomalies of potential archaeological interest and areas to be managed as S. Spinulosa reef.  Provide a further composite plan overlaying on the above features within the red line boundary in addition any sandbank features of conservation significance in the HHW SAC.	The Applicant has provided the requested plan as Appendix 8.1 to this document. When viewing the plan it should be noted that, as stated in the clarification note, only a small percentage of A2 anomalies are likely to be confirmed as being of archaeological interest, with an even smaller number being given protection by AEZs. Thus, the A2 anomalies presented in the plan do not represent a hard constraint. In the event that an A2 anomaly could not be avoided then other mitigation, as agreed with Historic England, would still be possible. The A2 anomalies presented in the plan are single data points and do not represent a	





Enhancing Society	/ logether	nancing Society Together				
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments		
			geographical area on the map. Therefore, the map appears more congested than would be the case on the ground.  It should also be noted that the areas to be managed as <i>S.spinulosa</i> reef are shapefiles provided by Natural England to show the areas where they have higher confidence that <i>S.spinulosa</i> reef <i>could</i> occur and not where they believe it to currently be present. As requested by the ExA areas of Annex I sandbanks have been added to the Plan. As can be seen in Figure 3 of Appendix 3 of the HHW SAC control document [REP6-011 or REP6-017] the cable corridor does avoid the majority of areas to be managed by sandbanks and where it does not it does cross them in such a way that overlap is minimised (i.e. perpendicular to the sandbank). It should be noted however that the Sandbank features would recover rapidly from cable installation <sup>3</sup> and therefore they do not represent a hard constraint for cable installation. More relevant for sandbanks is the long term impact of habitat loss caused by the placement of cable protection. Appendix 3 of the HHW SAC control document [REP6-011 or REP6-017] illustrates that it is likely that it would be possible to avoid the placement of cable protection within areas Identified as Annex I Sandbanks.  The Applicant remains confident in its conclusion that the offshore cable corridor has been designed to allow sufficient room to avoid impacts to sensitive features. Areas of seabed have been identified where the space available is potentially limited, however at these locations there is sufficient room to route export cables to avoid significant impacts.			
Q3.8.3.6	Marine Management Organisation	Micrositing within the HHW SAC:  In [REP5-073] the MMO noted that it still has concerns that micrositing may not be possible at the time of construction and would like this to be dealt with at consenting stage rather than post consent; and also that NE have queried how the MMO would make a decision between the potential impacts to Annex 1 reef and Archaeological interest features.  In order to assist the ExA in assessing the likelihood of successful micrositing to avoid these composite constraints, MMO, NE and HBMCE to comment on the Applicant's response to these concerns [REP6-013] claiming that "micrositing is possible at present and that there is unlikely to be any discernible difference in extent or location of the different constraints when final cable routing is undertaken" with specific reference to the reconciliation of multiple constraints including any additional constraints that may be presented by the presence of sandbanks in the cable corridor.	The MMO acknowledges the export cable corridor is wider than other offshore windfarms.  The MMO defers to NE in relation to HRA aspects.  The MMO welcomes the alternative condition to the Grampian condition – further comments can be found in Q3.5.5.5 and Q3.8.3.2.	The Applicant welcomes this response and will continue to discuss this further with the MMO.		
Q3.8.3.6	Natural England	Micrositing within the HHW SAC:  In [REP5-073] the MMO noted that it still has concerns that micrositing may not be possible at the time of construction and would like this to be dealt with at consenting stage rather than post consent; and also that NE have queried how the MMO would make a decision between the potential impacts to Annex 1 reef and Archaeological interest features.	NE is currently in the process of reviewing the final NVG documents in order to provide our statutory advice to the SoS. As set out by the ExA for Boreas the proposals for Boreas are an extension to those of NVG; we do not wish to prejudice our advice on either project therefore we will provide further advice on this after the 27th April NVG deadline (i.e. Boreas Deadline 9).	The Applicant awaits Natural England's further advice and will endeavour to respond in the time available between Deadline 9 and Deadline 10.		

<sup>&</sup>lt;sup>3</sup> Natural England state in the Relevant Representation [RR-099] that the mobile nature of this particular sandbank system would make it more likely to recover from changes in structure. Since the submission of the Relevant Representation, the Applicant has made a number of additional commitments to promote recover which have been welcomed by Natural England [REP6-051].





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		In order to assist the ExA in assessing the likelihood of successful micrositing to avoid these composite constraints, MMO, NE and HBMCE to comment on the Applicant's response to these concerns [REP6-013] claiming that "micrositing is possible at present and that there is unlikely to be any discernible difference in extent or location of the different constraints when final cable routing is undertaken" with specific reference to the reconciliation of multiple constraints including any additional constraints that may be presented by the presence of sandbanks in the cable corridor.		
Q3.8.3.6	Historic England	Micrositing within the HHW SAC:  In [REP5-073] the MMO noted that it still has concerns that micrositing may not be possible at the time of construction and would like this to be dealt with at consenting stage rather than post consent; and also that NE have queried how the MMO would make a decision between the potential impacts to Annex 1 reef and Archaeological interest features.  In order to assist the ExA in assessing the likelihood of successful micrositing to avoid these composite constraints, MMO, NE and HBMCE to comment on the Applicant's response to these concerns [REP6-013] claiming that "micrositing is possible at present and that there is unlikely to be any discernible difference in extent or location of the different constraints when final cable routing is undertaken" with specific reference to the reconciliation of multiple constraints including any additional constraints that may be presented by the presence of sandbanks in the cable corridor.		No submission has been made by Historic England at Deadline 7. The Applicant is not aware of any concerns that Historic have in this regard and this is reflected by the fact that the Statement of Common Ground between Historic England and the Applicant has been agreed in full [REP2-038].

# 8.4 Offshore ornithology

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.8.4.1	Natural England	Elements of Precaution:  NE to respond to the Applicant's comments [REP6-042] regarding the combination of individual elements of precaution.	Please see our responses in REP4-039, REP4-040 and REP4-043 regarding individual elements of precaution in offshore ornithology assessments. Please also see our responses in REP4-040, REP4-043 and our response to ExA second round question 2.8.4.4 in REP5-077 regarding the combination of individual elements of precaution in offshore ornithology assessments.  As noted in our responses in REP4-040 and REP4-043 there are also elements where the assessment may not be precautionary (e.g. the potential limitations in recording of site-specific data on seabird flight heights may have the potential to lead to underestimates of potential collisions and hence assessments may be lacking in precaution in this aspect). Further, the level of uncertainty in the assessment is high and therefore there is a requirement to be precautionary in our assessment of impacts.  With specific respect to the Applicant's comments regarding precaution in REP6-042, the Applicant makes specific reference of precaution in assessments in terms of:	The Applicant acknowledges Natural England's individual justifications for the precaution in the assessment. However, this does not address the question of how these individual elements combine to result in over precaution.  With respect to Natural England's comments on headroom and the sensitivity of collision results to the input data values used, this statement is correct (if the input data are incorrect then the results will also be incorrect) and applies to all calculations. However, the Applicant considers this to be a reason to check and agree on the input data used, rather than a reason not to apply the methods.





	ncing Society Together					
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments		
			Overly precautionary apportioning of kittiwake and lesser black-backed gull (LBBG) collisions due to use of the full breeding season and over- estimated apportioning rates; and,			
			Use of consented rather than as built wind farm designs in cumulative/in-combination collision assessments.			
			With regard to apportionment of kittiwake and LBBG collisions to relevant SPA colonies, Natural England notes that Norfolk Boreas is located within the foraging range of LBBG from the Alde-Ore Estuary SPA, we consider that the full breeding season in Furness (2015) is the most appropriate for assigning monthly impacts to the breeding season. The tracking data of kittiwake from the FFC SPA up until 2015 suggests low connectivity of the Norfolk Boreas site with foraging birds from the colony. However, further tagging of kittiwakes from the FFC SPA colony has been undertaken in 2017 and the results of this does indicate that some birds from the FFC SPA do forage within the Boreas site (Aitken et al. 2017; Wischnewski et al. 2018). Therefore, we again consider that the full breeding season in Furness (2015) is the most appropriate for assigning monthly impacts to the breeding season.			
			In terms of breeding season apportionment rates, we note that there is uncertainty in exact figures to use and this uncertainty should therefore be considered in assessments and a range based approach is considered entirely appropriate. In terms of the upper rates of these ranges used, we have acknowledged in REP4-040 that these are likely to be precautionary and we have in our Deadline 4 [REP4-040] and Deadline 7 advice, considered the Norfolk Boreas collision predictions alone and in the incombination totals using both the Natural England precautionary rates and the Applicant's preferred rates for Norfolk Boreas (and also for Norfolk Vanguard for in-combination).			
			With regard to use of consented rather than as built wind farm designs, please see our Deadline 6 [REP6-049] and Deadline 7 responses regarding the Applicant's approach/position regarding headroom and our response to the ExA third round question 3.2.1.2 above. It is true that if the CRM it conducted on what will be built rather than the Rochdale envelope worst case scenario that is assessed for each project then the collision predictions will come down. However, if the collision model or the density estimates are totally wrong they might be a lot higher for example.			
Q3.8.4.2	Natural England	In-combination Assessment:  NE to comment on the Applicant's updated in-combination collision risk modelling [REP6- 024].	Please see our Deadline 7 response (NE.NB.D7.08 CRM) to the Applicant's updated in-combination collision risk modelling presented in REP6-024.	The Applicant has provided a response to Natural England's Deadline 7 submission [REP7-047] in ExA.AS-3.D8.V1.		





#### 8.5 Greater Wash SPA

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.8.5.1	Natural England	Little gull:  Table 1 of NE's Deadline 4 representation [REP4-040] states that  NE is unable to rule out an AEOI to little gull of the Greater Wash  SPA from in-combination collision mortality when Hornsea Projects  Three and Four are included. However, section 7.2 of the same document states that NE agrees an AEOI can be ruled out. Further to the Applicant's revised in-combination assessment submitted at  Deadline 6 [REP6-024], can NE clarify its position in this regard.	Please see our updated advice in our Deadline 7 response (NE.NB.D7.08 CRM) to the updated assessment submitted by the Applicant in REP6-024, namely that we agree with the Applicant that an AEOI of the little gull feature of the Greater Wash can be ruled out for in-combination collision impacts irrespective of whether Hornsea 3 and Hornsea 4 are included in the totals or not.	The Applicant welcomes Natural England's agreement that there will be no AEoI on little gull due to the project alone or in-combination, with or without the inclusion of Hornsea Projects Three and Four.

## 8.6 Flamborough and Filey Coast SPA, Alde-Ore Estuary SPA and Haisborough Hammond and Winterton SAC

PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number				
Q3.8.6.1	The Applicant	Derogation:  The Applicant submitted an initial Position Paper on Derogation for relevant qualifying features at Flamborough and Filey Coast (FFC) SPA, Alde-Ore Estuary SPA and Haisborough Hammond and Winterton SAC [REP6-025]. While the ExA is aware that compensatory measures have been proposed for Norfolk Vanguard, it reminds the Applicant that compensatory measures for Norfolk Boreas should be specifically for this project.  1. Without prejudice, can the Applicant provide the necessary information for the SoS to consider whether the project can pass the IROPI test for each site?  2. Can the Applicant state when it will submit its fuller derogation cases?  What are NE's comments on compensation measures proposed?	<ol> <li>As requested, the Applicant has provided a without prejudice inprinciple habitats regulations derogation provision of evidence, which includes consideration of in-principle compensation, for each designated site which will permit the Secretary of State (SoS) to reach a determination on IROPI with respect to Norfolk Boreas in the event that the SoS cannot rule out AEoI notwithstanding the Applicant's clear position that AEoI can be ruled out both for the project alone and incombination .</li> <li>As stated above this has been submitted at Deadline 7 (ExA.Dero.D7.V1).</li> </ol>	
Q3.8.6.1	Natural England	Derogation:  The Applicant submitted an initial Position Paper on Derogation for relevant qualifying features at Flamborough and Filey Coast (FFC) SPA, Alde-Ore Estuary SPA and Haisborough Hammond and Winterton SAC [REP6-025]. While the ExA is aware that compensatory measures have been proposed for Norfolk Vanguard, it reminds the Applicant that compensatory measures for Norfolk Boreas should be specifically for this project.  3. Without prejudice, can the Applicant provide the necessary information for the SoS to consider whether the project can pass the IROPI test for each site?  4. Can the Applicant state when it will submit its fuller derogation cases?	Natural England is currently in the process of reviewing the Norfolk Vanguard and Hornsea Project 3 documents in order to provide our statutory advice to the SoS. As set out by the ExA for Boreas the proposals for Boreas are an extension to those of Norfolk Vanguard; we do not wish to prejudice our advice on either project therefore we will provide further advice on this once we have submitted to both the other examinations (i.e. Boreas Deadline 9).	The Applicant acknowledges the need for Natural England to ensure consistency across its advice. The Applicant will continue to proactively engage with Natural England with the aim of responding to Natural England's further advice (if necessary) within the examination timetable.
		What are NE's comments on compensation measures proposed?		
Q3.8.6.2	The Applicant	CRM for gannet and lesser black backed gull (LBBG):	The Applicant notes that this question is directed to the RSPB, however considers it important to stress that very large reductions have been	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		The RSPB has previously stated that it cannot agree no AEOI of gannet of the FFC SPA and LBBG of Alde-Ore Estuary SPA from collision mortality from Norfolk Boreas alone. Further to the Applicant's revised CRM at Deadline 5 [REP5-059], can the RSPB provide an update on its position in relation to these features and collision impacts from Norfolk Boreas alone. If the RSPB is unable to rule out an AEOI, please can it provide its reasons.	achieved in collision risk for all species following the design mitigations (increase in draught height to 30m from mean high water springs for 124 x 14.7MW turbines and to 35m for 158 x 11.55MW turbines). Gannet collisions have been reduced by 74% (from 58 to 15 collisions apportioned to Flamborough and Filey Coast SPA) and for lesser black-backed gull by 63% (from 5.9 to 2.1 using Natural England's preferred parameters and 4.3 to 1.6 using the Applicant's preferred parameters, collisions apportioned to the Alde Ore Estuary SPA).	
Q3.8.6.2	Royal Society for the Protection of Birds	CRM for gannet and lesser black backed gull (LBBG):  The RSPB has previously stated that it cannot agree no AEOI of gannet of the FFC SPA and LBBG of Alde-Ore Estuary SPA from collision mortality from Norfolk Boreas alone. Further to the Applicant's revised CRM at Deadline 5 [REP5-059], can the RSPB provide an update on its position in relation to these features and collision impacts from Norfolk Boreas alone. If the RSPB is unable to rule out an AEOI, please can it provide its reasons.	The RSPB has made efforts to review the latest alone and in-combination assessments and consider their implications for the Boreas project. However, all key staff involved with the review process have been dealing with contingency planning to deal with the Covid-19 crisis to ensure that the RSPB's staff and volunteers remain safe and well during this challenging time. This has therefore delayed the completion of our review and ability to respond to the latest assessments by Deadline 7. We will endeavour to respond to the latest assessments as soon as practically possible to provide an update on our position regarding impacts to features of the Flamborough and Filey Coast SPA and Alde-Ore Estuary SPA.  It should also be noted that moving Deadline 8 to 8th April 2020 means this now falls the day before submissions are due on the Hornsea 3 and Norfolk Vanguard projects. As the same RSPB specialists are reviewing and providing advice for the Norfolk Boreas project, we may also be limited in our ability to meet this revised deadline.	The Applicant appreciates the challenges that the current Covid-19 situation is causing to all parties. However in relation to this question it should be noted that following requests from the RSPB to consider options for raising draught height to mitigate potential ornithological impacts as far as possible, the Applicant undertook a detailed review of a range of mitigation options. This review was not limited to raising draught height, but also considered alternative turbine models and the availability of construction vessels. This led to a commitment to reduce the maximum number of turbines from the project design envelope and to increase the draught height as far as possible within the limit imposed by the installation capacity of available construction vessels. These mitigation measures reduced the estimated annual gannet mortality apportioned to the Flamborough and Filey Coast SPA to 15.1 for gannet (74% reduction) and the estimated annual lesser black-backed gull (LBBG) mortality apportioned to the Alde-Ore Estuary SPA to 2.1 (64% reduction). These updates were submitted at Deadline 5 (26 <sup>th</sup> February) and discussed with the RSPB on 27 <sup>th</sup> February 2020. It should be noted that Natural England agreed with the Applicant that no Adverse Effect on the Integrity (AEoI) could be concluded for both SPAs for the project alone, even before these mitigation measures were committed to by the Applicant. Therefore the Applicant sees no reason why the RSPB would not be able to conclude no AEoI for gannet from the Flamborough and Filey Coast SPA (even noting their disagreement with the avoidance rate advised by Natural England) and lesser black-backed gull from the Alde-Ore Estuary SPA due to collision mortality at Norfolk Boreas alone.

# 8.7 Flamborough and Filey Coast SPA

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.8.7.1	The Applicant	AEol:  NE [REP6-051] cannot agree to no AEol for gannet, guillemot and razorbill when Hornsea 3 and 4 are included. Accepting that uncertainty of the Hornsea projects are outside of the Applicant's control, are there further measures the Applicant could provide to satisfy NE on no AEol?	The Applicant has presented evidence to demonstrate that there is no risk of AEoI for gannet, guillemot and razorbill from the Flamborough and Filey Coast (FFC) Special Protection Area (SPA) due to the project alone and in-combination with other plans and projects (REP2-035). This has been agreed by Natural England for the project alone and in-combination with other plans and projects when Hornsea Projects Three and Four are excluded (REP4-040).  The only scenario for which Natural England (REP4-040) did not agree that an AEoI could be ruled out for these three species was when Hornsea Projects Three and Four are included, due to the uncertainties associated with these projects:	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number	audiesseu to.			
			'However, due to Natural England's significant concerns regarding the incomplete baseline surveys for the Hornsea 3 project, and the associated level of uncertainty as regards the potential impacts of that project, together with the inevitable uncertainty associated with the figures for Hornsea 4 from the PEIR and are subject to change'	
			[note the above text was stated in REP4-040 for all three species].	
			Therefore the Applicant considers that Natural England's concern is with respect to the uncertainties the Hornsea projects introduce to the incombination assessments (the Applicant understand this relates to the baseline data used for the Hornsea Project Three assessment and the fact that only a preliminary assessment is available for Hornsea Project Four), and this is the reason Natural England has been unable to rule out AEol with their inclusion.	
			Furthermore, since this was also Natural England's position at the close of the Norfolk Vanguard examination, it appears that no level of mitigation for Norfolk Boreas alone could satisfy Natural England's concerns with respect to in-combination effects. Since the contribution to the incombination total from Hornsea Projects Three and Four is wholly beyond the control of the Applicant there is nothing more that the Applicant can do.	
Q3.8.7.1	Natural England	AEol:  NE [REP6-051] cannot agree to no AEol for gannet, guillemot and razorbill when Hornsea 3 and 4 are included. Accepting that uncertainty of the Hornsea projects are outside of the Applicant's control, are there further measures the Applicant could provide to satisfy NE on no AEol?	Natural England is currently in the process of reviewing the Norfolk Vanguard and Hornsea Project 3 documents in order to provide our statutory advice to the SoS. As set out by the ExA for Boreas the proposals for Boreas are an extension to those of Norfolk Vanguard; we do not wish to prejudice our advice on either project therefore we will provide further advice on this once we have submitted to both the other examinations (i.e. Boreas Deadline 9).	The Applicant acknowledges Natural England's response on this matter, although also notes that the question was focussed on the topic of what additional measures for gannet, guillemot and razorbill the Norfolk Boreas Applicant could consider to mitigate in-combination impacts. It is the Applicant's understanding that Natural England's concern (as stated in REP7-045) with Hornsea Project Three is regarding their baseline survey data and with Hornsea Project Four is because this project has only submitted a preliminary assessment. It is clear that both of these are outside the Applicant's control. The Applicant would be grateful if Natural England could confirm if the Applicant's understanding is correct or clarify their position on this point.
Q3.8.7.2	The Applicant	Derogation: The Applicant to explain why gannet, razorbill and guillemot are not included in the Position Paper on Derogation [REP6-025].	As noted in response to Q3.8.7.1, the Applicant has presented evidence to demonstrate that there is no risk of AEoI for gannet, guillemot and razorbill from the FFC SPA due to the potential effects of the project alone and in-combination with other plans and projects (REP2-035), and this has been agreed by Natural England with the exception of when Hornsea Project Three and Four are included (REP4-040).  The situation for gannet, guillemot and razorbill is therefore materially different from Natural England's position on kittiwake from the FFC SPA and lesser black-backed gull (from the Alde-Ore Estuary SPA) for which Natural England considers that AEoI cannot be ruled out irrespective of whether or not Hornsea Projects Three and Four are included (REP4-040). This was also Natural England's position for Norfolk Vanguard.  Therefore it is the Applicant's understanding that Natural England's	
			position on AEoI (that this can't be ruled out with the inclusion of Hornsea Projects Three and Four) for gannet, guillemot and razorbill from the FFC SPA rests solely on the uncertainties due to the Hornsea projects, which are outside the Applicant's control. Since the SoS's request for a derogation case for Norfolk Vanguard only identified those SPA features	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			for which Natural England could not rule out AEoI when Hornsea Project Three was not included (i.e. kittiwake from FFC SPA and lesser black- backed gull from AOE SPA), the Applicant considers that this is a robust and appropriate basis on which to consider in principle derogation for Norfolk Boreas and therefore there is no need to consider derogation for these features (gannet, razorbill and guillemot).  Furthermore, even with the uncertainties that Natural England has expressed about all ornithological impacts at the Hornsea Project Three wind farm, the SoS did not request consideration of derogation for these species for that wind farm.	

# 9 Landscape and Visual Effects

# 9.0 The Applicant's landscape and visual assessment

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7: Applicant's Comments	
			No Questions	

# 9.1 The Applicant's visual assessment

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.9.1.1	The Applicant	Sensitivity of receptor Explain how the motorists along the A47 are assessed as having the same sensitivity as residents represented by other viewpoints [APP-242], eg Viewpoints VP4, VP5, VP6, VP8, VP9, VP10.	It may be useful to read the answer to Q3.9.1.2 first, as it explains how sensitivity is assessed. In summary, sensitivity is assessed by combining the value of the view and the susceptibility of the viewer to the change that will arise as a result of the proposed development. Typically, the value of the views in the study area will be medium as there are no formal or informal viewpoints with visibility of the onshore project substation or National Grid substation extension. There are also no landscape designations which would otherwise denote a special scenic quality and there is an existing influence from energy infrastructure. The variable in the assessment is typically susceptibility to change.  In total, four of the 12 viewpoints are representative of visual receptors; namely Viewpoint 8: Chapel Road, Necton; Viewpoint 9: St Andrews Lane, Necton; Viewpoint 10: Holme Hale and Viewpoint 12: Ivy Todd. The statement that motorists are assessed as having the same sensitivity as residents is not true in respect of Viewpoint 9: St Andrews Lane, which is representative of residents on St Andrews Lane. Here, the sensitivity is assessed as medium to high, which is higher than the medium sensitivity attributed to motorists on the A47. It is also higher than the medium sensitivity attributed to residents represented by Viewpoint 8 and Viewpoint 12, reflecting the higher landform at the northern end of St Andrews Lane and the more open aspect across the adjacent farmland towards the National Grid substation extension, that some residents would experience as a result.	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number			In respect of Viewpoint 8: Chapel Road, Necton, and Viewpoint 12: Ivy Todd, the sensitivity rating is medium, the same as that of motorists on the A47 and slightly less than that of residents on St Andrews Lane. The susceptibility of residents to the potential effects of the proposed development is moderated by the lower-lying location of Chapel Road and the lower-lying location and extent of tree cover in respect of Ivy Todd. This means that residents are less susceptible as they don't have the same open outlook or visual connection with the site. In respect of Viewpoint 10: Holme Hale, the sensitivity of the residents is lower than that of the motorists and this reflects the very limited susceptibility of residents to the proposed development as there would be very limited visibility from the settlement.  While typically the susceptibility of road-users would be lower than residents, the very close proximity of road-users on the A47 to the National Grid substation extension and the A47 junction, increases their susceptibility to the effects of the proposed development. This part of the assessment also factors in consideration of the large volume of visual receptors that will be experiencing views, from the A47. This consideration is covered in Paragraph 56 of the LVIA Methodology [APP 677, Section 6] which states; "A viewpoint that is visited or used by a large number of people would tend to have a greater importance than one gained by very few people, although this is not always the case." There are approximately 20,000 vehicles passing the viewpoints on the A47 every day.	
Q3.9.1.2	The Applicant	Visual assessment terminology  Provide clarity on the visual assessment process in terms of "value of view", "value of receptor", "susceptibility to change", "sensitivity of visual receptor", "sensitivity of view", "overall sensitivity to change" [APP-677, Section 6]. Specifically clarify if "overall sensitivity to change" and "sensitivity of view" are the same.	The "value of the view" relates principally to the recognised value associated with a formal viewpoint, whilst also considering the value of informal viewpoints and/or the scenic qualities and condition of the landscape which makes up the view. It also takes into account the consideration of the volume of people experiencing that view. In respect of the representative viewpoints used in the LVIA, the value is typically medium to reflect the absence of any formal or informal viewpoints, and/or any landscape designations which would otherwise indicate a special scenic value.  The "value of the receptor" is a term that is used more in respect of landscape receptors than visual receptors, as in the visual assessment, value is particular to the view and not the visual receptors. The exception occurs where the value of a principal visual receptor is being described, for example where a special value is attached to a tourist route.  The "susceptibility to change" assesses the susceptibility of the visual receptors to the change that would be brought about by the introduction of the proposed development in its specific location. This takes into account the nature of the viewer, the occupation or activity they are likely to be engaged in, and their experience of the view, for example residents at home and in gardens experiencing static views or road-users on the A47 experiencing transitory views. It also considers what the principal characteristics of the view are, for example if there is a strong existing focus or an existing influence from a specific type of development, that will also have an influence on their susceptibility to the proposed development.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			The "overall sensitivity to change" combines the assessment of the value of the view and the susceptibility of the visual receptors to the proposed change, in order to arrive at an overall rating for sensitivity which considers both the nature and experience of the visual receptors and the value and key characteristics of the view they are experiencing. This is then combined with the rating for magnitude of change to determine whether the effects are significant or not.	
			The "sensitivity of a visual receptor" is referring primarily to the susceptibility of the visual receptors to the proposed development, as it is this part of the sensitivity rating that relates to visual receptors.	
			The "sensitivity of the view" is referring primarily to the value of the view, as it is this part of the sensitivity rating that relates to the view. The "sensitivity of the view" is therefore different to the "overall sensitivity to change," and is one of the factors considered in the overall "sensitivity to change".	

#### 9.2 Alternatives considered

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.9.2.1	The Applicant	Top Farm  Confirm whether the Top Farm site was considered as an alternative site, if this is different from Top Farm being "reviewed as an alternative site". If so when was it considered/reviewed [REP2-021, response to Q2.2.8(2)]?	The Top Farm site was not specifically considered as an alternative to the current proposed location because Top Farm is located within the 3km search area around the existing Necton National Grid Substation that had previously been reviewed as part of the site selection process (detailed in ES Chapter 4 Site Selection and Assessment of Alternatives [APP-217]).  This search area, within which Top Farm is located, was reviewed as part of an early stage of the site selection process in 2016 and 2017, during Phase 1 non-statutory consultation; the search area was presented at seven public exhibition events held across the scoping area, including one at Necton on 21st October 2016.	
			Top Farm is located within Sector 1 and 5 of the search area (shown on ES Figure 4.9 [APP-256] and in ES Appendix 4.9 [APP-545]). All five sectors of the search area were presented to the local community and feedback was sought. The 3km search area around the existing Necton National Grid Substation was then refined as a result of environmental constraints to produce the "keyhole" search area (ES Figure 4.10 [APP-257]). The keyhole search area was subsequently consulted on during Phase II non-statutory consultation in March 2017 at community events and stakeholder meetings. It was immediately prior to this stage that the sectors within which Top Farm is located were excluded from further consideration in the site selection process. This is because these sectors (and therefore Top Farm) fell within the residential buffer zone (ES Figure 4.10 [APP-257] and ES Appendix 4.10 [APP-546]).	
			As detailed in the Applicant's response to the Open Floor Hearing [REP1-036]:  Top Farm, would have two significant effects – moving the onshore project substation closer to more residential properties, including within	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			the currently excluded residential buffer zones, and requiring significant earthworks in order to level the footprint, prior to commencement of construction works. This second consideration is significant because it would require a lengthier pre-construction and construction period to establish a level foundation, require greater traffic movements to remove excavated materials and transport additional construction materials with associated impacts such as noise, and create a more notable impact on landscape character and visual amenity due to additional earthworks. The site is also constrained from a technical perspective by the presence of overhead lines.	
Q3.9.2.2	The Applicant	Top Farm Clarify the heights mentioned regarding the comparison made between the Top Farm site and the proposed onshore project substation site (proposed site 65m to 70m and Top Farm 65m to 75m) [REP2-021, response to Q2.2.8(2)] in light of the dDCO secured "existing ground levels" set at 73m AOD (Scenario 1) and 72m AOD (Scenario 2) in Requirement 16 (8)(a) and (b) [REP5-003].	The height range of 65m to 70m has been taken from the OS 1:25,000 map of the area. Appendix 9.1, Figures 1d and 2d show an outline of the onshore project substation footprints in respect of Scenario 1 and Scenario 2 respectively. The 65m contour line passes to the south-west of the site and the 70m contour through the centre of the site, while the 75m contour set beyond the north-east of the site. In order to understand how the proposed platform levels of 72m (Scenario 2) and 73m (Scenario 1) fit with the existing site levels, it is necessary to refer to the more detailed contour plans shown on the updated version of Appendix 9.1 – Figures 1b and 2b submitted at Deadline 7 [ExA.AS-4.D7.V2]. These show that in the northeast corner of the site the levels rise slightly beyond the 70m contour to close to 74m in respect of Scenario 2 and 74m in respect of Scenario 1. This explains how the proposed platforms can be accommodated within existing site contours and without building up levels.	

### 9.3 Landscape effects

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.9.3.1	The Applicant	Provide an aerial image of the landward part of the landfall zone clearly marking the England Coast Path, the 125m line from the cliff edge, and the proposed landfall compound zone, indicative landfall compounds and onshore cable route.	A plan showing the landfall aerial image as requested has been produced and is presented in Appendix 9.2.	

### 9.4 Visual effects

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			No Questions	





### 9.5 Outline Landscape and Ecological Management Strategy (OLEMS)

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Quest	on addressed to:			
Numb	er			
			No Questions	

#### 9.6 Good Design

PINS Question		Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.9.6.2	addressed to: The Applicant	Design and Access Statement (DAS)  Submit an updated DAS in which consideration has been given to the following:  Reference to the National Infrastructure Commissions' Design Principles for National infrastructure;  Reference to and inclusion of the examples of the "agricultural style" typology submitted to the Examination [REP5-0047, Appendix 9.2];  Reference to the proposed district-wide post consent DASs,  Clarity and certainty over the involvement of Necton Parish Council (at its request) (eg in para 70);  Reference to an overall design approach or vision, not just mitigation (para65);  Whether an additional aim is also to assist in seeking approvals under Requirement 18;  Whether there should be a statement about Scenario 1 and Scenario 2 in the DAS, in terms of cumulative effects and what could be achieved in Scenario 1, when the Norfolk Vanguard substations would be constructed;  The NFU's suggestion in the updated SoCG with the Applicant [REP6-032, Pages 6 to 7] that a statement to confirm that cut and fill (for the proposed onshore project substation) would be undertaken at the midpoint to minimise landscape impact should be included in the DAS;  Whether materials and colours of the small control buildings associated with Work No. 10A should be included in the Design Guide;  Checking the proposed National Grid substation extension indicative mitigation planting Scenario 2 drawing is consistent with that in the ES.	<ul> <li>The Applicant agrees to include a reference to the 'National Infrastructure Commissions' Design Principles for National Infrastructure' and the identified four design principles can be considered as part of the design process and included within an updated DAS.</li> <li>The photographs of agricultural style submitted in Appendix 9.2 [REP5-047] can be included as an appendix within the DAS.</li> <li>The DAS captures the principles of design on above ground infrastructure; it would not therefore be necessary to provide a separate DAS post-consent. The DAS has been updated to include a new paragraph to make clear the relevance and applicability of the principles in the DAS across all districts.</li> <li>The detail added to Section 5.3.6 of the DAS [REP5-012] on the Design Process states that stakeholders will be refined in light of the information provided in collaboration with Breckland Council. Examples of stakeholders who will be engaged with are provided and include Necton Parish Council along with Holme Hale Parish Council, relevant landowners, closest residents and other relevant residents / groups. The Applicant is committed to engage with all relevant stakeholders during this process and will amend the wording in the DAS to make this clear they will engage with Necton Parish Council and relevant landowners.</li> <li>Reference to design approach will be added to paragraph 65.</li> <li>The Design and Access Statement is to provide details of the use, layout, scale and appearance of onshore project substation</li> <li>The Applicant can confirm that the proposed mitigation planting at the National Grid Substation under Scenario 2 is the same on DAS Figure 8 [REP5-017] as presented on ES Figure 29.20b [APP-5 05]. There is a slight difference in some of the other features shown on the figures e.g. DAS Figure 8 shows existing attenuation ponds as well as the proposed new location, and ES Figure 29.20b shows the overhead line search area, however this is not a permanent feature</li></ul>	residents / groups. The Applicant is committed to engage with all relevant stakeholders during this process and will amend the wording in the DAS to make this clear they will engage with Necton Parish Council and relevant landowners.  Reference to design approach will be added to paragraph 65.  The Design and Access Statement is to provide details of the use, layout, scale and appearance of the onshore project substation to assist in seeking approvals under Requirement 16. The Design Guide will present details of landscaping and provide a means by which the local authority and stakeholders can provide feedback,





PINS Question Number		Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
				<ul> <li>wording, 'The options proposed will ensure that the onshore project substation is sensitive to place, with visual impacts minimised as far as practical by the use of appropriate design, planting and modifications to landscape topology and hydrology'.</li> <li>The above secured aspects provide the necessary flexibility in the final design whilst acknowledging the principles of the ground level approach and the need for sensitivity in the landscape topology. To provide a statement which stringently limits the cut and fill to an existing midpoint only, prior to detailed design, would not be appropriate because it would limit any ability, for example, to potentially lower the ground level below the existing midpoint, however marginally, should overall cut material be made available for on-site landscaping/bunding.</li> <li>The Design Guide is only applicable to the onshore project substation (Work No 8A) not the National Grid substation extension (Work No 10A). The design and requirements of the National Grid substation extension equipment is pre-determined by international electro-technical standards, and by National Grid's own technical specifications. The extension is predominately external equipment which is dictated by the technical performance characteristics required to safely and efficiently operate the equipment at 400 kV and it is not possible to alter the appearance and finishes of this electrical equipment. Accordingly, the appearance of the equipment comprised in Work No. 10A will be very similar to that of the equipment in the existing Necton National Grid substation.</li> <li>The Applicant can confirm that the proposed mitigation planting at the National Grid Substation under Scenario 2 is the same on DAS Figure 8 [REP5-017] as presented on ES Figure 29.20b [APP-5 05]. There is a slight difference in some of the other features shown on the figures e.g. DAS Figure 8 shows existing attenuation ponds as well as the proposed new location, and ES Figure 29.20b shows the overhead line search area,</li></ul>
Q3.9.6.3	The Applicant	Design and Access Statement  Address seeming inconsistencies in what is intended regarding the design process and Design Guide's role with regards some of the architectural features, such as materials and colour bearing in mind NPS EN-1's requirement to take into account function and aesthetics:  Whether the wording "landscape design rather than the substation architecture" gives the wrong impression of what is intended as set out in Appendix 1;  Whether the Design Guide content (Appendix 1) should state that functionally non- negotiable aspects of the architecture (such as converter hall height, footprint etc) which would be driven by function, would be set out in the Design Guide;  Whether the Design Guide should make a link to the OLEMS, by which the materials and colour of the	<ul> <li>Due to the technical and functional requirements of the onshore project substation there are a limited number of architectural elements which can be influenced, which is why the Design Guide will be focused on landscape design rather than substation architecture. The onshore project substation is largely made up of structural electrical equipment the design of which cannot be influenced.</li> <li>The Design Guide will set out the design of the built features, including the structural components which are functionally nonnegotiable, as well as the landscape features. The Applicant will update the text in the DAS to make this clear.</li> <li>A reference to the OLEMS and Requirement 18 (2)(j) will be added to the Design Guide.</li> <li>The construction material for the proposed converter building serves a functional purpose in providing a managed environment for the sensitive converter equipment and will include structural requirements to support features such as internal overhead</li> </ul>	





PINS Question		Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number	addressed to:	onshore project substation are secured (R18(2)(j));  Whether some of the references to colour should also state materials;  Whether it would be a colour and materials comparison study (Appendix 1), and whether some of the testing of this would actually occur outside in the vicinity ofthe proposed onshore project substation, clarifying the penultimate paragraph of Appendix 1.	gantries. Consideration will also be required on the construction material functionality with respect to aspects such as fire safety, weatherproofing and maintainability. The Applicant would identify any construction material optionality, if available, which satisfies the functional requirements and this could be considered within the design process. The DAS will be updated to reflect materials options will be considered if they meet the necessary technical / functional requirements.  • As the selection of the materials to be used will be dictated by the functional requirements of the onshore project substation, the comparative study would focus principally on the choice of colour. This would offer the greatest scope in terms of changing the appearance of the onshore project substation. The photomontages would be used to illustrate the colour options by applying a range of colours to the model of the converter halls. Furthermore, baseline photography would be taken at different times of the year to represent the seasonal changes in the colours of the local landscape and the models presented in the context of these changes. In order to best understand and appreciate the colour options, it is advised that site visits be carried out by the local authority and stakeholders, where the photomontages can be considered, along with test panels of the different colour options.	
Q3.9.6.4	The Applicant	Use of Design and Access Statement Would the Design and Access Statement be used in the contractor procurement process?	Yes, the Applicant would provide the tendering contractors the DAS as part of the package of relevant consent documents for them to consider through the procurement process.	
Q3.9.6.5	National Farmers Union	<ul> <li>Design and Access Statement: further comments</li> <li>Further to comments at Deadline 5, the SoCG between the Applicant and the NFU [REP6- 032] and Breckland Council's future role which would be responsible for post consent approvals: <ol> <li>Provide any comments on the DAS submitted at Deadline 5 [REP5-013] to [REP5- 017].</li> <li>Provide any views on any of the points in the two questions above and/ or any further points you consider should be included or amended.</li> </ol> </li> </ul>	<ul> <li>The NFU is content with the wording covering landowner engagement at paragraph 72 but it should be stated that engagement must take place with landowners.</li> <li>The NFU thinks that it is imperative that the landowners affected and the local communities of Necton PC and Holme Hale PC must be consulted in regard to colour options for the converter building and also native species that might be suitable for the landscaping. Paragraph 66 needs to be re worded to highlight this, some involvement as stated is not enough.</li> <li>This request is confirmed for all landowners affected directly by the converter station.</li> <li>This request also extends to covering the National Grid Substation extension.</li> <li>The NFU will be interested to see the response to these questions from Breckland Council.</li> </ul>	The Applicant submitted an updated Design and Access Statement (DAS) at Deadline 7 (Version 4) [REP7-005], paragraph 76 confirms that engagement 'will include Necton Parish Council, Holme Hale Parish Council, relevant landowners and closest located residents to the onshore project substation.' As set out in Section 5.3.6 of the DAS the Applicant will follow the Design Process and using the Design Guide will engage with these stakeholders on the colour options for the convertor building and the species to be selected for the landscaping.  The Design Guide is specific to the onshore project substation, the design and requirements of the National Grid substation extension equipment is pre-determined by international electro-technical standards, and by National Grid's own technical specifications. The extension is predominately external equipment which is dictated by the technical performance characteristics required to safely and efficiently operate the equipment at 400 kV and it not possible to alter the appearance and finishes of this electrical equipment. Accordingly, the appearance of the equipment comprised in Work No. 10A will be very similar to that of the equipment in the existing Necton National Grid substation.
Q3.9.6.7	Breckland Council	Future approvals  1. How would you ensure the right skills to engage in the design process (as set out in REP5-013, Plate 4) and to consult, amend if necessary and approve would be available to the Council?  2. Do you have any further comments on the DAS wording regarding future engagement [REP5-013, para 72] whereby you and the Applicant would determine which stakeholders would be engaged in the design		





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		process in light of the information in the Design Guide?  3. Is there anything further you would wish to see incorporated regarding Scenario 1, where the Norfolk Vanguard substations may have preceded the design process described in the DAS for the Norfolk Boreas proposed development?		

# 9.7 Matters arising from the accompanied site inspection (ASI) on Thursday 23<sup>rd</sup> January

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.9.7.1	The Applicant	Provide updated contour drawings at Deadline 7, with contours visible under colour shadings for substation and other assets [REP5-047, Appendix 9.1, Figures 1b and 2b].	Updated plans have been produced and are presented in Appendix 9.1.	

# **10** Marine and Coastal processes

### **10.0** Marine and Coastal processes

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			No Questions	

# 11 Navigation

### 11.0 Navigation

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			No Questions	

### **12** Onshore construction effects

### 12.0 Cable corridor and ducting

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.12.0.1	The Applicant	Workfront strategy Should the explanation provided at [REP5-045, ExA2.12.0.1] be included in the Outline Landscape and Ecological Management Strategy (OLEMS)? If not, why not?	As detailed in the Applicant's response to ExA Q2.12.0.1 [REP5-045];  At all times the sectionalised duct installation workfront strategy will be employed, save for trenchless crossing locations, along the cable route (Scenario 2 only). The length of the workfront may however differ from the notional 150m during the construction process to maintain the	





Ennancing Society	riogether			
			principle of mitigation (excavate, install and reinstate within a 1 to 2 week period) whilst appreciating some sections of the cable route will be more or less complex. This reason for flexibility in the workfront length can be added to the OLEMS [REP5-022] to clarify the securement of 150m workfronts, where possible and that the sectionalised duct installation workfront strategy will apply at all times.	
Q3.12.0.2	The Applicant	The ExA notes the arguments presented by the Applicant in the Clarification Note Trenchless Crossings B1149 and Church Road, Colby [REP04-017], by NCC in its D5 submission [REP5-066], and by the Applicant in its response [REP6-013].  1. Parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.	It is the Applicant's position that an open cut crossing method is appropriate and feasible at this location.  As stated in the technical note [REP4-017] to retain flexibility in the trenchless crossing method which could be most appropriately employed for the location (e.g. HDD, micro-tunnelling, auger boring) additional temporary land, outside of the current Order limits, would be required. Whilst it is possible to develop a bespoke design to enable a trenchless crossing in this location (in the event the SoS decides that a trenchless crossing of the B1149 is necessary), this bespoke design would only accommodate the HDD trenchless crossing method, and no other trenchless crossing method. This is because only a single compound could be included within the existing Order limits. This compound would need to be set back approximately 250m from the crossing location, rather than alongside the trenchless crossing launch and exit locations. At all other trenchless crossing locations flexibility is retained for all trenchless crossing methods so that the most appropriate solution can be employed following ground investigation, cable design (sizing) and detailed design of the trenchless crossing.  Therefore, to accommodate an HDD at this specific location within the Order limits would constrain the Project design prior to detailed design and investigations being conducted. For a bespoke trenchless design, a temporary works compound of 100m x 45m (4,500m²) would be required to support the works within the existing Order limits.  Norfolk Vanguard, in response to the Secretary of State's letter dated 6 December 2019, has undertaken an environmental assessment of this potential change to the previously assessed working methodology. The assessment identifies that trenchless crossings require the flexibility to extend into the evening and night time due to the continuous nature of those activities, and in the event of evening or night time working there is the potential for significant construction noise impacts to occur a	
Q3.12.0.3	The Applicant	B1149 Crossing  Provide an aerial image(s) clearly marking the full extent of the traffic management proposals at the B1149 crossing (AC89) including the access point AC90, diversion lane, extent of the required resurfacing and the cable corridor. If it helps clarity mark the south western verge and the	An aerial image showing the traffic management proposals is presented in Appendix 12.1.	





Ennancing Society	J logether			
		north eastern verge on separate copies of the aerial image.		
Q3.12.0.4	The Applicant	B1149 Crossing (open cut trench/ trenchless crossing) Provide your views on the effect on hedgerows and trees in relation to the trenchless crossing and proposed diversion lane under discussion for the B1149, as mentioned by NCC [REP5-066, final page].	The Applicant acknowledges that hedgerow removal would be required to accommodate a trenched crossing of the B1149 and the associated traffic management. The removal of hedgerow along the cable route, including a crossing at the B1149, has been assessed in the Environment Statement, all hedgerow will be reinstated on completion of construction and as such no significant effect is identified. The length of hedgerow removal is increased as a result of the traffic management, however the increase in length does not result in a material change to the assessment conducted.	
Q3.12.0.4	Broadland District Council	B1149 Crossing (open cut trench/ trenchless crossing) Provide your views on the effect on hedgerows and trees in relation to the trenchless crossing and proposed diversion lane under discussion for the B1149, as mentioned by NCC [REP5-066, final page].	Very concerned about the impact on the roadside hedgerows and trees as a result of an open cut trench across the B1149 for the installation of the cable route. The proposed diversion lane will significantly increase this adverse impact. The roadside hedgerows and trees will not be impacted to the same extent if a trenchless crossing is utilised subject to careful siting to avoid the better tree species.	Please refer to the Applicant's comments on ExA Q3.5.3.8 (see above). At this location the roadside vegetation is predominantly hedgerows however there is the potential to impact on two trees however their removal will not impact on landscape character as the roadside vegetation is predominantly hedgerows. The Applicant will seek to avoid the two trees through mirco-siting during the detailed design stage. All hedgerows will be reinstated and if removed trees will also be replaced. As a result, the ecological and landscape and visual impacts associated with a trenched crossing at the B1149 are not short-term and significant. It is the Applicant's position that evidence has been submitted which demonstrates that an open cut crossing method is appropriate and feasible at this location.
Q3.12.0.5	The Applicant	Church Road, Colby (open cut trench/ trenchless crossing) Further to NNDC's update, in which it is stated that you are considering the NNDC option presented, provide your comments [REP6-043].	The Applicant has undertaken a review of potential environmental constraints and opportunities of the proposed amendment to the crossing of Church Road, Colby, proposed by NNDC at Deadline 5 [REP5-067]. Full details of the review are presented in the Position Statement on Church Road, Colby submitted at Deadline 7 [ExA.AS-01.D7.V1]. The review identified:  • The proposed realignment to the running track would introduce potentially significant safety risks to road users along Church Road without further detailed assessment and the identification of additional mitigation;  • Potential for significant construction noise impacts at Banningham Hall Farm Cottages for up to 19 weeks, given the proximity of this noise sensitive receptor to both the works areas and the two proposed new road junctions (15m).  • Whilst trees can be replaced in the location from which they would be removed under NNDC's alternative proposal, there is the potential for significant landscape and visual impacts to be experienced by residents of Banningham Hall Cottages (significant for 5-10 years) due to trees being removed directly opposite this property until replacement trees become established. In addition, Banningham Hall will have direct views of the trenchless crossing compound (for the duration of the trenchless crossing works – approximately 10-12 weeks) compared to the more contained activities of open cut trenching for a shorter period of time.  Furthermore the amendment cannot be accommodated within the existing Order limits.  The Applicant's final position is that NNDC's proposed alternative is not a proportionate or appropriate alternative and the proposed trenched crossing of Church Road is considered appropriate given that access through the hedgerows lining Church Road will always be necessary. Micrositing will seek to minimise tree losses, any trees removed will be	





Ennancing society	- regetine.			
			replaced as close as practicable to the location where they were removed, and hedgerows will be fully reinstated.	
			As detailed in the Position Statement on Church Road, Colby submitted at Deadline 7 [ExA.AS-01.D7.V1] the Applicant has undertaken a high-level survey to establish, in approximate terms, which trees would be likely to be removed to accommodate the trench crossing and to illustrate the potential for some replacement trees to be included, along with the replacement of the hedgerows, as part of the mitigation planting. The survey identified three immature and one semi-mature tree will require removal and that at least two replacements trees can be planted within the Order limits, with a further potentially be accommodated following detailed design.	
			The Applicant's final position is that owing to the very small number of trees being removed and the presence of existing notable gaps in the trees cover already at this location, the change brought about by the loss of these four trees will not notably alter the baseline landscape character. Replacement planting of hedgerows would ensure the sense of enclosure on Church Road could be restored once the hedgerows matured. The Applicant has committed to replacing all trees within North Norfolk to ensure no net loss. To further mitigate potential impacts micro-siting of the cable will be undertaken to limit tree removal and to target smaller specimens for any tree removal required, as well as to maximise the opportunity for replacement trees to be planted within the Order limits.	
			If all replacement tree planting cannot be accommodated within the Order limits (subject to detailed design post-consent) then they will be replaced as close as practically possible, ideally further along to ensure no net loss of trees on Church Road (subject to landowner consent outside of the Order limits).	
			Given there will be no notable change in the landscape character of Church Road and that all tree losses will be replaced, this is considered sufficient to mitigate impacts from tree losses at this location.	
Q3.12.0.7	The Applicant	Church Road, Colby (open cut trench/ trenchless crossing) Parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.	The Applicant has provided a Position Statement on Church Road, Colby submitted at Deadline 7 [ExA.AS-01.D7.V1] which contains additional information on potential impacts on Church Road and potential mitigation measures, including details of the site survey. The Applicant's final position is that given there will be no notable change in the landscape character of Church Road and that all tree losses will be replaced, this is considered sufficient to mitigate impacts from tree losses at this location	
			In any event, the Applicant is strongly of the opinion that the national benefits of the proposed development significantly outweigh these localised impacts. Therefore, to the extent that matters cannot be agreed between the Applicant and NNDC, this will ultimately be a matter for the ExA to consider and for the Secretary of State to determine.	





#### 12.1 Mobilisation areas

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.12.1.2	The Applicant	<ol> <li>Respond to NNDC's point that there are other matters which relate more to visual amenity impacts, beyond the remit of environmental protection issues [REP6-043, response to Q2.12.1.3].</li> <li>Is the term "neighbouring communities" [REP5-011, para 61] sufficiently wide to cover all relevant types of sensitive receptors – eg the Quaker Burial Ground adjacent to Trenchless crossing zone 14a/b and Mobilisation area MA10?</li> </ol>	1. The CoCP provides a mechanism to ensure that all environmental impacts associated with construction will be controlled and mitigated. The final CoCP will include a site layout showing the location of mobilisation areas, trenchless crossing technique (e.g. HDD) compounds, the onshore project substation temporary works area and National Grid substation extension temporary works area and the main features of these sites. As such these will be subject to a review and approval process by the relevant planning authority as part of the discharge of Requirement 20.	
			Further information on the process for ensuring measures are in place to minimise any effects relating to these elements has been included in Section 3.2 of the OCoCP. The main control for any visual amenity is the height of temporary welfare facilitates and storage units which is stated in Section 3.2, as no greater than 3m in height. The OCoCP sets out the principles which will be adopted to minimise effects however site-specific control measures will be identified when further details of the construction activities are available post-consent to ensure the most appropriate mitigation is identified, including any potential visual amenity impacts if applicable.	
			2. The additional information in the OCoCP [REP5-011] at section 3.2 paragraph 61, has been specifically included to address concerns on neighbouring communities/human receptors and is considered to be an appropriate term. The impacts on other sensitive receptors such as buried archaeology or ecology are covered by the relevant topic specific management plans e.g. Written Scheme of Investigation Archaeological Investigation and Ecological Management Plan.	

## 12.2 Noise and Vibration

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.12.2.1	The Applicant	Noise Sensitive Receptors  The ExA notes the Joint Position Statement with North Norfolk DC on Noise Sensitive Receptors [REP6-022]. The ExA also notes unresolved matters with Broadland DC in the updated Statement of Common Ground (SoCG) [REP6-026], regarding the appropriateness of the position of sensitive receptors.  1. The Applicant, North Norfolk DC and Broadland DC to submit a joint position statement regarding Noise Sensitive Receptors, as an update to the submissions [REP6-022] and [REP6-026]. Joint Position Statement to include detail on the process for reaching agreement (if agreement has not been reached) including implications if no agreement reached before close of Examination. 2. The dDCO [REP5-044] defines noise sensitive locations (Noise Sensitive Locations) (NSL) as those in Table 25.27	1. The Applicant has updated the joint position statement previously agreed with North Norfolk District Council (NNDC) to also address the concerns raised by Broadland District Council (BDC) and circulated it to both authorities.  An Updated Joint Position Statement on Noise Sensitive Receptors [ExA.AS-2.D7.V1] has been submitted at Deadline 7. This position statement reflects the position previously agreed with NNDC and has been updated to include an agreed position with BDC, subject to the updates of the OCoCP, to be submitted at Deadline 8.  2. and 3. The definition of noise sensitive locations in the dDCO is specific to Requirement 27 for control of noise during the operational phase, to identify the locations in the vicinity of the operational onshore project substation noise levels, where operational monitoring will take place to ensure compliance with the agreed noise levels i.e. 'the location of the relevant Receptor Identifier SSR1–SSR11 in Table 25.27, Chapter	





PINS	Question is addressed	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	to:			
Number		of ES chapter 25 [APP-238]. Provide an updatedtable 25.27 in light of the joint position statement with North Norfolk DC and Broadland DC.  3. Should the definition of NSLs in the dDCO [REP5-044] be updated to refer to the definition in the ES Chapter 25 [APP-238]? If not, is there a potential for confusion between NSLs as defined in the dDCO and NSRs as defined in the ES?	25 of the environmental statement.' These are specific to the locations around the onshore project substation which could be affected by operational noise.  The definition and location of noise sensitive receptors considered within the position statement and discussed with NNDC and BDC relate to noise sensitive receptors during construction and along the onshore cable route and as discussed in the position statement are not just the representative locations assessed in the ES (Table 25.27). These will include any receptors as defined in the updated table presented in the position statement and to be included in the OCoCP.  Therefore, the Applicant considers the terms as currently used are appropriate.	
Q3.12.2.1	Broadland District Council	Noise Sensitive Receptors  The ExA notes the Joint Position Statement with North Norfolk DC on Noise Sensitive Receptors [REP6-022]. The ExA also notes unresolved matters with Broadland DC in the updated Statement of Common Ground (SoCG) [REP6-026], regarding the appropriateness of the position of sensitive receptors.  1. The Applicant, North Norfolk DC and Broadland DC to submit a joint position statement regarding Noise Sensitive Receptors, as an update to the submissions [REP6-022] and [REP6-026]. Joint Position Statement to include detail on the process for reaching agreement (if agreement has not been reached) including implications if no agreement reached before close of Examination.  2. The dDCO [REP5-044] defines noise sensitive locations (Noise Sensitive Locations) (NSL) as those in Table 25.27 of ES chapter 25 [APP-238]. Provide an updatedtable 25.27 in light of the joint position statement with North Norfolk DC and Broadland DC.  3. Should the definition of NSLs in the dDCO [REP5-044] be updated to refer to the definition in the ES Chapter 25 [APP-238]? If not, is there a potential for confusion between NSLs as defined in the dDCO and NSRs as defined in the ES?	<ol> <li>Joint position statement on Noise Sensitive Receptors to be submitted by applicant.</li> <li>Applicant to confirm.</li> <li>Content that in the circumstances that a receptor location in proximity to the onshore cable route that is not specifically assessed within the ES will have its impact assessed by reference to a comparable location a similar separation distance to the cable route.</li> </ol>	<ol> <li>An Updated Joint Position Statement on Noise Sensitive Receptors was submitted at Deadline 7 [REP7-034] which reflects the position previously agreed with North Norfolk District Council and the agreed position with Broadland District Council.</li> <li>The position statement identified additional information to be included in the OCoCP. This additional information has been captured in the updated Section 9 of the OCoCP submitted at Deadline 8 (Version 4).</li> <li>Please refer to the Applicant's response to Q3.12.2.1. In addition, the OCoCP has been updated to include a definition of noise sensitive receptors during construction.</li> <li>Please refer to the Applicant's response to Q3.12.2.1.</li> </ol>
Q3.12.2.2	The Applicant	The SoCG with Broadland DC [REP6-026] states that the mitigation of cumulative noise, vibration and air quality effects along The Street at Oulton are captured within "section 4.3.2 of the Outline Traffic Management Plan (OTMP) [APP-699] and secured through dDCO Requirement 21".  1. The Applicant to update the section and document reference in light of therevised OTMP [REP5-026] submitted to this Examination.  2. Confirm if the proposed alterations to Old Railway Gatehouse (identified as optional measures to further minimise disturbance) are part of the mitigation measures that reduce the cumulative adverse effects on the property to non-significant.	<ol> <li>The reference to the OTMP will be updated to reflect the latest OTMP.</li> <li>The proposed alterations to Old Railway Gatehouse are offered as optional additional measures to further minimise potential perceived disturbance by the residents. They are not necessary to mitigate the effects to non-significant.</li> <li>As detailed in the assessment specifically considering the noise, vibration and air quality effects at the Old Railway Gatehouse at Oulton (undertaken by Norfolk Vanguard and submitted as part of the Examination as Appendix 1 of the Broadland Statement of Common Ground Version 1 submitted at Deadline 2 [REP2-047]). Mitigation was proposed for potential cumulative impacts from road traffic in the form of a cap on the maximum number of daily HGV movements, a temporary speed restriction, regarding the road surface in proximity to</li> </ol>	





Ennuncing society	g Society Together et al. 1997 to 1997				
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments	
		<ol> <li>Provide evidence of consent or progress of receiving consent from the property owner to implement measures to further minimise perceived disturbance impacts. If this consent is not yet achieved, then how can the proposed mitigation be given weight in the ExA's consideration?</li> <li>Broadland DC, clarify what you mean by "the cumulative impacts on living conditions for the occupier need to be assessed further" in the SoCG [REP6-026]?</li> <li>Broadland DC, given that the principles of the mitigation measures specified are acceptable, specify the imperative to revise the working in the OTMP and how.</li> </ol>	the Old Railway Gatehouse, incorporation of passing places along The Street and priority warning signs in proximity to The Old Railway Gatehouse. With these mitigation measures in place residual impacts related to noise and vibration were not significant based on the agreed Environmental Impact Assessment criteria. Norfolk Boreas has committed to adopting these mitigation measures which are captured within Section 4.3.3 of the Outline Traffic Management Plan (OTMP) [REP5-025] and secured through DCO Requirement 21.  3. During the Norfolk Vanguard examination the Norfolk Vanguard project team did contact the resident of Old Railway Gatehouse including discussions on the proposed additional measures to be undertaken at the property. Phone calls were held with the resident in April and May 2019, both of which were followed up with email correspondence.  Subsequently both Norfolk Vanguard and Norfolk Boreas have committed to adopting these measures should the resident wish to take them forward.  No further contact has been made by Norfolk Boreas as the measures proposed are as discussed for Norfolk Vanguard. The Applicant will look to engage further with the owner with a view of progressing these matters post-consent when further design details are available.  The proposals are optional additional measures to further minimise potential perceived disturbance by the residents. If they are not consented to by the resident then the mitigation measures secured in the OTMP [REP5-025] are sufficient to mitigate impacts to a nonsignificant level.		
Q3.12.2.2	Broadland District Council	Old Railway Gatehouse  The SoCG with Broadland DC [REP6-026] states that the mitigation of cumulative noise, vibration and air quality effects along The Street at Oulton are captured within "section 4.3.2 of the Outline Traffic Management Plan (OTMP) [APP-699] and secured through dDCO Requirement 21".  1. The Applicant to update the section and document reference in light of therevised OTMP [REP5-026] submitted to this Examination.  2. Confirm if the proposed alterations to Old Railway Gatehouse (identified as optional measures to further minimise disturbance) are part of the mitigation measures that reduce the cumulative adverse effects on the property to non-significant.  3. Provide evidence of consent or progress of receiving consent from the property owner to implement measures to further minimise perceived disturbance impacts. If this consent is not yet achieved, then how can the proposed mitigation be given weight in the ExA's consideration?  4. Broadland DC, clarify what you mean by "the cumulative impacts on living conditions for the occupier need to be assessed further" in the SoCG [REP6-026]?	<ol> <li>Applicant to submit.</li> <li>Request that the physical alterations to Old Railway Gatehouse comprising new double glazing on elevations towards the road and a noise attenuation barrier to the garden form part of the agreed package of measures to reduce the cumulative traffic impact of up to 3 onshore cable projects on the living conditions of the occupier.</li> <li>Applicant to submit.</li> <li>This is a reference to the impacts from traffic associated with up to 3 'cumulative' onshore cable projects passing this property. However after clarification from the applicant no further assessment is required.</li> <li>Agreed that the OTMP will provide sufficient controls for potential traffic related noise, vibration and air quality impacts.</li> </ol>	<ol> <li>The latest SoCG has been updated to reflect the latest version of the OMTP. An updated OTMP has been submitted at Deadline 8.</li> <li>The Applicant notes Broadland District Council's request that the physical alterations to Old Railway Gatehouse are secured to reduce cumulative traffic impact on the residents. However, as detailed in the Applicant's response to Q3.12.2.2 these alterations are not required to reduce the cumulative impacts to not significant. The measures already detailed and secured in Section 4.3.3 of the OTMP reduce cumulative impacts to a level which is not significant.</li> <li>The Applicant will look to engage with the owner to agree and implement the alterations when further details are available, however the alterations are subject to the consent of the owner.</li> <li>The Applicant provided this information in response to Q3.12.2.2.</li> <li>Noted.</li> <li>Noted.</li> </ol>	





PINS	Question is addressed	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	to:			
		<ol> <li>Broadland DC, given that the principles of the mitigation measures specified are acceptable, specify the imperative to revise the working in the OTMP and how.</li> </ol>		
Q3.12.2.3	The Applicant	Enhanced Mitigation  The Outline Code of Construction Practice (OCoCP) version 3 [REP5-011, para 131], refers to potential requirement for enhanced mitigation to be identified for specified receptors.  North Norfolk DC and other discharging authorities to comment if "potential requirement" should be strengthened, and if so, propose wording.	As agreed with NNDC through the Joint Position Statement on Noise Sensitive Receptors [REP6-022], additional information on the locations potentially requiring enhanced mitigation will be captured in an updated OCoCP. The potential requirement is reflective that the need for the enhanced mitigation is dependent on the type of activity, for example in some locations enhanced mitigation may only be required if night time working at trenchless crossings is required.  Further information on the enhanced mitigations required will be detailed in the Construction Noise (and vibration) Management Plan produced as part of the final CoCP, approved by the relevant planning authority.	
Q3.12.2.3	Broadland District Council	Enhanced Mitigation  The Outline Code of Construction Practice (OCoCP) version 3 [REP5-011, para 131], refers to potential requirement for enhanced mitigation to be identified for specified receptors.  North Norfolk DC and other discharging authorities to comment if "potential requirement" should be strengthened, and if so, propose wording.	Content that potential requirement is adequate subject to the required mitigation measures being identified during the detailed design stage and included in the Construction Noise and Vibration Management Plan to be submitted and approved by the Local Planning Authority as part of the final CoCP and discharge of requirements.	Section 9 of the OCoCP has been updated to confirm this commitment and submitted at Deadline 8 (Version 4).
Q3.12.2.4	The Applicant	Enhanced Mitigation  With reference to your response regarding noise barriers [REP2-021], highlight where in the revised OCoCP version 3 [REP5-011], is the commitment to assessing impacts of the noise barriers secured? Confirm if reference to section 3.7 (artificial lights) remains accurate in the revised OCoCP version 3 [REP5-011].	In the Written Response to this within [REP-021], the Applicant stated:  "Barrier design would be dependent on the surroundings and optimised depending on the required level of required mitigation. There are various methods which could be employed and varying designs.  BS5228:2009+A1:2014 identifies that the effectiveness of a barrier is limited by transmission over and around the barrier, provided that the barrier material has a mass per unit of surface area exceeding about 7kg/m². Standard demountable barriers are widely available from a number of manufacturers to attenuate noise where necessary. The actual final design would need to be selected based on level of required attenuation, proximity to sensitive receptors, task specific and using Best Practicable Means."  Furthermore, the response continues:  "Where barriers are identified as being appropriate for noise mitigation, the location would be agreed with the Local Planning Authority (Section 9.1.2.2 of the OCoCP (REP1-018)."  The Applicant will update the text within the OCoCP to reflect this.  With regards to Section 3.7 of the OCoCP (version 3) [REP5-011] the text	
Q3.12.2.5	The Applicant	Enhanced Mitigation	is accurate. As stated, the details of the location, height, design and luminance of all floodlighting to be used during the construction of the project, together with measures to limit obtrusive glare to nearby residential properties, will be set out in the Artificial Light Emissions Management Plan which will be submitted to the local authorities for approval prior to construction commencing.  A Construction Noise (and vibration) Management Plan (CNMP) will be	





PINS	Question is addressed	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	to:			
		<ol> <li>North Norfolk DC and other discharging authorities, should the OCoCP [REP5-011, section 9.1.2.2] include a commitment for noise barrier locations to be agreed with relevant local planning authorities?</li> <li>Should there be a commitment for the assessment of the impact of noise barriers be carried out in consultation with the relevant local planning authorities?</li> <li>Applicant to comment.</li> </ol>	Requirement 20 (2)(e) of the draft DCO and submitted for approval to the relevant planning authority. The CNMP will detail the design of onshore assets and will incorporate Best Available Techniques (BAT) and Best Practicable Means (BPM) to minimise any associated noise impacts; where applicable, enhanced mitigation measures will also be detailed, such as noise barrier locations.  The CNMP will be developed prior to construction when further details of the construction activities are known, this will ensure that the most appropriate controls and mitigations are identified. The development of the CNMP will include a review of the construction activities and the identification of any potential noise sensitive receptors (as defined in Table 1 of [REP6-022]) which may be affected.  Based on the type of construction activity proposed, e.g. establishment of a mobilisation area, and the sensitivity of the receptor, the CNMP will then detail the appropriate controls which will be in place to minimise any potential effects. The results of the process will be submitted to and reviewed by the relevant planning authority as part of the final CoCP and discharge of DCO Requirement 20 (2).  As detailed in the Joint Position Statement with NNDC [REP-022] the Applicant will update the OCoCP to reflect this.	
Q3.12.2.5	Broadland District Council	<ol> <li>Enhanced Mitigation</li> <li>North Norfolk DC and other discharging authorities, should the OCoCP [REP5-011, section 9.1.2.2] include a commitment for noise barrier locations to be agreed with relevant local planning authorities?</li> <li>Should there be a commitment for the assessment of the impact of noise barriers be carried out in consultation with the relevant local planning authorities?</li> <li>Applicant to comment.</li> </ol>	<ul> <li>1 &amp; 2. The required mitigation measures will be identified during the detailed design stage and included in the Construction Noise and Vibration Management Plan to be submitted and approved by the Local Planning Authority as part of the final CoCP and discharge of requirements.</li> <li>3. Applicant to comment.</li> </ul>	<ol> <li>&amp; 2. Section 9 of the OCoCP has been updated reflect the measures agreed in the Updated Joint Position Statement on Noise Sensitive Receptors [REP7-34] and submitted at Deadline 8 (Version 4).</li> <li>The Applicant has provided a response to Q3.12.2.5 (see above) in the Applicant's Responses to the ExA's Third Round of Written Questions [REP7-036].</li> </ol>
Q3.12.2.6	The Applicant	<ol> <li>Do you agree with the suggestion from North Norfolk DC [REP6-043] that selecting Category A would be more appropriate to protect receptors from night-time noise disturbance?</li> <li>If not, why not?</li> <li>If there is agreement, provide a commitment in OCoCP.</li> </ol>	The approved approach for construction phase impacts, as outlined within the Noise and Vibration Method Statement (Royal HaskoningDHV, 2018, unpublished) and utilised in Chapter 25 Noise and Vibration of the ES [APP-238] is the threshold based 'ABC' method. The method is detailed within BS 5228, which specifies a construction noise limit based on the existing ambient noise level and for different periods of the day.  The predicted construction noise levels were assessed against noise limits derived from advice within Annex E of BS 5228. Table 25.4 APP-238] is reproduced from BS 5228:2009+A1:2014 Table E.1 and presents the criteria for selection of a noise limit for a specific receptor location. These threshold levels were determined from measured representative existing baseline noise levels.  The BS 5228 night time threshold corresponding to Category A is 45dBA. The BS 5228 Category B threshold (50dBA) at night time was determined applicable to receptors CRR2 and CRR30 due to their locations in close proximity to the carriageway, (the B1145 and the A47 respectively). All other receptors were identified as Category A.  However, in the interests of ensuring the protection of residential amenity during the sensitive night time period, the Applicant has no	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			objection to adopting the 45dBA threshold i.e. Category A at all receptors.  For context along the Onshore Cable Route the conservative construction phase scenario identified exceedances over the night time 45dBA threshold at CRR1, CRR3, CRR5, CRR26 and CRR31. For the night time 50dBA threshold (Category B) only CRR2 and CRR30 exceeded this level during the proposed worst case scenario. In all instances enhanced mitigation measures were advised.  The Applicant will update the text within the OCoCP to reflect that the 45dBA threshold will be adopted for all residential receptors during the night time period.	

#### **12.3** Construction Hours

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			No questions	

# 13 Socio-economic effects

# 13.0 Skills and Employment Strategy

PINS C	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question a Number	addressed to:			
Number				
			No questions	

### 13.1 Jobs

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			No questions	

#### 13.2 Tourism

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.13.2.1	The Applicant	Tourism Mitigation Strategy  The ExA notes that there is agreement between the Applicant and North Norfolk DC that the long-term effect on the long-term effects of the cable route on the tourism economy will be not	1. The Applicant considers that there is no evidential link that the short-term construction presence for an offshore wind farm in North Norfolk would lead to an actual or perceived impact on tourism. The Applicant has fully assessed this in the ES (Chapter 30) [APP-243].	





Enhancing Society	Together			
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		significant. The ExA further notes that the disagreement between the parties is on the impact of cable corridor construction phase on local tourism businesses, the need for a tourism and associated business impact mitigation strategy, and securingthis through a requirement in the dDCO.  1. The Applicant to provide a brief summary of its assessment to the specific point about the impact of the cable corridor construction phase (including 150m workfronts, location and duration of installation of mobilisation area compounds, and landfall location) on local tourism and associated businesses.  2. The Applicant to provide, without prejudice, wording for a dDCO Requirement relating to tourism and associated businesses in case the SoS decides to include such a Requirement  3. Parties to submit any additional information to assist the ExA in reaching its recommendation to the SoS.	As stated in Section 30.7.1 the Applicant has committed to number of embedded mitigation measures to ensure that the impact of construction on local tourism businesses is minimised. For example;  • Tourism and recreation receptors were considered as part of site selection and the constraints mapping process. Through constraints mapping and site selection, overlap and direct interaction with a number of key sites have been avoided such as The North Norfolk AONB and the Heritage Coast, Blue flag beaches, golf courses, caravan parks.  • Strategic approach to delivering Norfolk Boreas and Norfolk Vanguard and use of a sectionalised workfront strategy to minimise the amount of land being worked at any one time and would minimise overall disruption.  • Commitment to long HDD at the landfall to avoid restrictions or closures to Happisburgh beach and retain open access to the beach during construction and agreement not use the beach car park at Happisburgh South.  • Community engagement is ongoing and will continue throughout the development of the project including with key tourism and recreation stakeholder, including business owners in the vicinity of the onshore works.  As set out in Section 30.4.1 of Chapter 30 of the ES, a desk based study was used to collate data from websites (the full list can be found in Table 30.11) providing publicly available data to create a source – pathway – receptor model to demonstrate the mechanism of a potential impact. As set out in Section 30.5.1 of Chapter 30 of the ES, the model considered both direct and indirect impacts at both county wide and local levels. Through use of this model the Applicant was able to conclude the main tourism draws for each area, and if local tourism businesses would be affected by the cable corridor construction phase. Overall, as concluded in Section 30.7.4.4.4 of Chapter 30 of the ES, the impact on local tourism businesses during the cable route construction phase. Overall, as concluded in Section 30.7.4.4.4 of Chapter 30 of the ES, the impact on lo	





	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
Number			contribution due, or at least set out the basis as to how such a calculation should be made. Without this it may not be possible to reach agreement on what level of compensation was due, or even how this should be calculated. It would also need to set out how any compensation payable would be apportioned to relevant tourism organisations and, indeed, which organisations supporting and promoting tourism in North Norfolk were considered to be relevant. To the Applicant's knowledge, no such policy document exists which can be referenced in such a requirement. Unless these matters were identified (i.e. in adopted policy) or clearly set out in a document which had been agreed between the relevant parties in advance of the requirement being imposed, any requirement drafted cannot refer to that document, and therefore cannot meet the tests of being precise, enforceable or reasonable.  In addition, without any supporting policy such a requirement could not be said to be relevant to planning and relevant to the development to be permitted. This is because NNDC has not provided any evidence that there will be actual impacts on tourism as a result of negative perceptions of construction offshore wind farms or, more particularly, as a result of negative perceptions of this particular development's construction. This is particularly so given the temporary construction period, along with the bespoke working front construction methodology and other construction mitigation already secured for this development. Indeed, NNDC have agreed that there will be no long-term impact from construction of the development and state in their Local Impact Report (LIR) [REP2-087] that "the long-term impacts of the cable route on the tourism economy will be benign".  Further, there is no mechanism in any policy (or agreed) document which would enable claimants to prove that compensation was required as a direct result of the development as opposed to other factors (whether micro or macro) which may impact the tourism industry in this particula	
			NNDC has put forward a proposed requirement on which the Applicant has	
			commented in the Applicant's response to Q2.13.2.1 submitted at Deadline	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			Appendix 1 of REP3-011 titled 'Position Statement North Norfolk District	
			Council Requested Requirement to Address Perceived Tourism Impacts'.	
			In summary, this proposed requirement would not meet the test set out in	
			paragraph 55 of the NPPF for the reasons set out above; compensation is	
			not necessary to mitigate any impacts identified in the ES; the requirement	
			lacks precision in requiring mitigation by way of an unquantified financial	
			payment with no agreed or adopted mechanism for its calculation post	
			consent; it would not be possible for claimants to prove that compensation	
			was required as a direct result of the development; and there is no	
			quantum of compensation that can be specified so that it can be said that	
			the compensation sought is fairly and reasonably related in scale and kind	
			to the development.	
			3. The Applicant refers the ExA to its previous submissions on this matter –	
			most notably in response to Q2.13.2.1 submitted at Deadline 5 [REP5-045],	
			and through REP3-011 together with the Position Statement at Appendix 1	
			of REP3-011 titled 'Position Statement North Norfolk District Council	
			Requested Requirement to Address Perceived Tourism Impacts'. The	
			Applicant notes that NNDC's LIR [REP2-087] (see para 14.17) states that if	
			the ExA accepts that there is the potential for substantial negative impact	
			on tourism in North Norfolk, the Applicant has not provided any evidence	
			that a balancing exercise favours making the DCO despite those negative	
			impacts. In that event, the Applicant is firmly of the view that the national	
			and long term benefits of this important renewable energy development	
			significantly outweigh any temporary and localised impact on tourism in	
			North Norfolk. Those benefits are clearly set out throughout the	
			Applicant's submissions to the examination, including in the Planning	
			Statement submitted with the application [APP-693] and more recently in	
			the draft Derogation Case submitted at Deadline 7 [ExA.Dero.D7.V1]. If the	
			ExA is in any doubt on the very important and significant national benefits	
			of this development, then further submissions can be made on this by the	
			Applicant.	

### 13.3 Land use and Agriculture

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.13.3.2	The Applicant	OCoCP in relation to Agricultural Private Water Supplies:  1. Provide an update on progress resolving outstanding disagreement in the SoCG with the NFU [REP6-032] relating to wording in the OCoCP regarding interference to Agriculture Private Water Supplies.  2. If agreement is not reached before the end of the Examination, what would be the consequences for the application?	1. The Applicant considers that it is necessary for the wording 'reasonable endeavours' to be included given that to remove this qualification could lead to a suggestion that the Applicant would need to undertake works and/or provide an alternative supply by any means. This could lead to a suggestion that the Applicant would need to invoke its compulsory acquisition powers in order to find an alternative plot for the landowner/agricultural tenant, which would not be reasonable or proportionate in the circumstances.	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		Question:	Furthermore, there could be circumstances where the Applicant could contribute to the costs of relocating cattle to an alternative location with a water supply. In this instance, the Applicant would not directly be providing an alternative supply of water but would instead be facilitating the provision of a reasonable alternative. The wording "reasonably" and "reasonable endeavours" would therefore allow greater flexibility for the parties to agree a pragmatic solution at the time and in view of the particular circumstances.  The Applicant will consider any wording on this matter that exists in existing OCoCPs for relevant projects of a similar type.  2. The Applicant will continue to engage with the NFU with a view to agreeing suitable wording prior to the end of examination.  In the event that the parties cannot agree on the exact wording to be included in the OCoCP then this will fall to be considered by the Secretary of State. It should, however, be noted that the Applicant does not dispute the main principle of the matter but, rather, the Applicant considers that the wording should maintain flexibility for the parties to agree to a commercial solution at the time. It is for these reasons that the Applicant considers the following should maintain reference to 'reasonable endeavours':  "Where an existing private water supply to an agricultural holding is adversely and directly, affected by the construction of the Proposed Works, if reasonably requested by the landowner/agricultural tenant, the Developer will use reasonable endeavours to provide or procure or meet the reasonable cost of the provision of an alternative.  Where the supply is so affected temporarily by the construction of the Proposed Works, then the alternative need only be provided for the period during which it is affected.  Where a request is made by the agricultural tenant or landowner for a permanent supply due to permanent severance of the existing supply	Applicant's Comments
			caused by the construction of the Proposed Works then, if the landowner/agricultural tenant can demonstrate that an alternative means of supply is reasonably required for its agricultural operation, the Developer will use reasonable endeavours to provide or procure or meet the reasonable cost of an alternative."	
Q3.13.3.2	National Farmers Union	1. Provide an update on progress resolving outstanding disagreement in the SoCG with the NFU [REP6-032] relating to wording in the OCoCP regarding interference to Agriculture Private Water Supplies.  2. If agreement is not reached before the end of the Examination, what would be the consequences for the application?	Land Use and agriculture: Private Water Supplies: The NFU does not like the wording 'reasonable endeavours' as it is not a strong enough commitment given the importance of a provision of a water supply. If the water supply is adversely and directly affected by the construction works, then it is right that the developer should either find an alternative supply or pay for the cost of an alternative.  Within the wording submitted we have provided some protection to the developer as it says 'reasonable costs of the provision of an alternative'. Therefore the developer is not exposed to an unreasonable ask from a	The Applicant has further considered its wording and proposes the following changes to the OCoCP to take into account some of the comments from the NFU. It makes clear that the Applicant is only responsible for the cost of installation of the supply – not the supply of water as well, and only if it is viable to do so, as it may be more economic to compensate or provide a different solution.  "Where an existing private water supply to an agricultural holding (previously notified in writing to the main works contractor by the landowner) is adversely and directly affected by the construction of the





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		Question:	Interested Parties' Response at Deadline 7:  landowner/occupier. The wording further says that the landowner/occupier has to demonstrate that the alternative means of supply is 'reasonably required'.  The following wording has been agreed in regard to water supplies for the A303 Stonehenge application for a DCO by Highways England. This is the latest scheme where NFU have been involved.  Private water supplies:  There an existing private water supply to a farm is adversely and directly affected by the construction of the Scheme, the main works contractor shall, if requested by the farmer or landowner to do so, provide or procure or meet the reasonable cost of the provision of an alternative supply of water (the form and type of which shall be at the contractor's option). Where the supply is affected temporarily by the construction of the	Proposed Works, if reasonably requested by the landowner/agricultural tenant, the Developer will use reasonable endeavours to provide or procure or meet the reasonable cost of the provision of installing an alternative supply of water (the form and type of which shall be at the contractor's option) within the Order land where it is viable to do so.  Where the supply is so affected temporarily by the construction of the Proposed Works, then the installation of the alternative need only be provided for the period during which it is affected.  Where a reasonable request is made by the landowner/agricultural tenant for a permanent supply due to permanent severance of the existing supply caused by the construction of the Proposed Works then, if the landowner/agricultural tenant can demonstrate that an alternative means of supply is reasonably required for its agricultural operation, the
			Where the supply is affected temporarily by the construction of the Scheme, then the alternative supply need only be supplied for the period during which it is affecte  Where a request is made by the farmer or landowner for a permanent supply due to permanent severance of the existing supply caused by the construction of the Scheme, the main works contractor shall, where provision of an alternative means of supply can be demonstrated by the land owner/farmer to be reasonably required for his business, provide or procure or meet the reasonable cost of a permanent means of alternative supply of water (the form and type (either borehole or mains supply) shall be at the contractor's option).  Water Supply Statements	means of supply is reasonably required for its agricultural operation, the Developer will use reasonable endeavours to provide or procure or meet the reasonable cost of installation of an alternative (the form and type (either borehole or mains supply) shall be at the contractor's option) within the Order land where it is viable to do so."
			The main works contractor shall produce Water Supply Statements for landowners / occupiers who rely on private water supplies which could be affected by the Scheme. These shall identify how water supply is to be maintained in the unlikely event that existing supplies are adversely affected as a consequence of the works. The statements shall be produced and provided to landowners / occupiers and The Authority prior to works commencing and include, as a minimum:  a) Details and locations of existing boreholes which supply the landowner / occupier;  b) Recorded results from groundwater monitoring undertaken by the main works contractor (as part of the Groundwater Management Plan) that are relevant to those boreholes;  c) How an emergency will be reported if water is contaminated;	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			<ul> <li>d) The procedure for getting water to a farm and how it will be distributed to animals and residential properties if water is affected on a temporary basis; and</li> <li>e) The procedure for getting a new supply of water whether from a borehole, mains supply or combination of both to a farm if the water from the boreholes is contaminated on a permanent basis.</li> </ul>	

#### 13.4 Public Health

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.13.4.1	Public Health England	Effects of electromagnetic fields (EMF)  1. Repeated question as no response yet received from PHE. Are you content with the Applicant's assumptions and assessment regarding EMF in ES Chapter 27 Human Health [APP-240], especially at the location where the underground cables of Hornsea Project Three would cross with Norfolk Boreas?  The Applicant states at [REP1-036] that "HVDC technology to transmit power from the wind farm to the national grid eliminates many potential impacts associated with EMF emissions. The available evidence from studies of humans and animals has been reviewed by Public Health England and internationally by the World Health Organisation and the International Agency for Research on Cancer. None of these expert bodies has identified any health risk for humans or animals exposed to DC magnetic fields." Do you agree with this statement? If not, why not?	We are satisfied with the Applicant's assumptions and assessment as set out in ES Chapter 27 Human Health [APP-240].	The Applicant welcomes confirmation from Public Health England that they are satisfied with the Human Health assessment.
Q3.13.4.2	Public Health England	The Applicant states at [REP1-036] that "HVDC technology to transmit power from the wind farm to the national grid eliminates many potential impacts associated with EMF emissions. The available evidence from studies of humans and animals has been reviewed by Public Health England and internationally by the World Health Organization and the International Agency for Research on Cancer. None of these expert bodies has identified any health risk for humans or animals exposed to DC magnetic fields." Do you agree with this statement? If not, why not?	We can only comment on the human health aspects of the statement. It is possible to agree the statement providing exposures to DC magnetic fields comply with the relevant international (ICNIRP) guidelines.	The Applicant confirms that the onshore equipment will be designed and installed to comply with the relevant international (ICNIRP) guidelines on DC magnetic fields (see the Vattenfall EMF information submitted as Appendix 1 of the Comments on Relevant Representations [AS-025]).

#### 13.5 Other offshore industries and activities

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
	addressed to:			
Number				
			No Questions	





# **14 Traffic and transportation**

### 14.0 Outline Traffic Management Plan (OTMP)

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments			
Question	addressed to:						
Number							
No Questions Responded to							

### 14.1 Highway Intervention Scheme for Link 34 (B1145 through Cawston)

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.14.1.2	The Applicant	Highway Intervention Scheme  What are your views on the suitability of the revised Highway Intervention Scheme (HIS) [REP5-028, appendix 6] to mitigate the effects of construction traffic on link 34 Cawston Village, in light of the Road Safety Audit (RSA) and the Applicant's responses to the recommendations [REP5-055].	A meeting was held with NCC on the 16th March 2020 to discuss the Highway Intervention Scheme (HIS) Road Safety Audit (RSA). During this meeting NCC indicated that no further amendments were required to the HIS and there were no remaining technical objections. Accordingly, NCC also indicated they will be completing the RSA log to finalise the scheme.  NCC have raised a potential concern with regard to driver compliance, that drivers may fail to yield at pinch points causing traffic to back up, inducing unacceptable delays.  In response to this concern, the Applicant has agreed to intensify the monitoring regime to facilitate early warning of issues and to work with NCC to develop correction measures to be introduced should driver compliance concerns manifest. On agreement of these measures, they will be included in an update to the Outline Traffic Management Plan	
Q3.14.1.3	The Applicant	Highway Intervention Scheme  Submit the updated HIS [REP4-016] for Link 34 taking on board the recommendations of the RSA [REP5-055].	[REP5-025].  The Applicant has addressed all the recommendations made in the Road Safety Audit (RSA) in the revised HIS drawings submitted at Deadline 5 [REP5-027]. NCC have indicated that no further amendments are required to the HIS and there are no remaining technical objections. Accordingly, NCC also indicated they will be completing the RSA log to finalise the scheme.	
Q3.14.1.4	The Applicant	Highway Intervention Scheme Provide any additional information to assist the ExA in making its recommendation to the SoS in respect of the Highway Intervention Scheme.	There is no disagreement between NCC and the Applicant over the Highway Intervention Scheme (HIS) – it is agreed by the Applicant and NCC that the HIS will deliver suitable and acceptable mitigation for Cawston. The HIS submitted at Deadline 5 [REP5-027] can be described as a detailed outline scheme. It represented a cumulation of months of development having been subject to numerous revisions as a result of extensive stakeholder engagement and two independent Road Safety Audits. The detail of the scheme has been taken much further than would ordinarily be expected at this stage. It is unusual for a scheme to be worked up to this level of detail in advance of consent, but the Applicant was nevertheless willing to do so recognising the concerns of local communities and to give the Examining Authority, and in turn the Secretary of State, comfort as to its feasibility for adequate mitigation, which is secured and can be delivered.  As previously outlined, the Applicant has addressed all the recommendations made in the Road Safety Audit (RSA). NCC have indicated that no further amendments are required to the HIS and there	





Enhancing Society				
PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
			are no remaining technical objections. Accordingly, NCC also indicated they will be completing the RSA log to finalise the scheme.	
			NCC have raised a potential concern with regard to driver compliance, that drivers may fail to yield at pinch points causing traffic to back up, inducing unacceptable delays.	
			In response to this concern, the Applicant has agreed to intensify the monitoring regime to facilitate early warning of issues and to work with NCC to develop correction measures to be introduced should driver compliance concerns manifest. On agreement of these measures they will be captured in an update to the Outline Traffic Management Plan [REP5-025].	
Q3.14.1.5	The Applicant	1. Would the proposed maintenance regime of grass cutting of visibility splays, address the problem highlighted in the RSA of ongoing maintenance and how would overhanging vegetation be managed?  2. Provide any additional information to assist the ExA in making its recommendation to the SoS in respect of the Highway Intervention Scheme.	A meeting was held with NCC on the 16th March 2020 to discuss the Highway Intervention Scheme (HIS) Road Safety Audit (RSA). During this meeting NCC indicated that no further amendments were required to the HIS and there were no remaining technical objections. Accordingly, NCC also indicated they will be completing the RSA log to finalise the scheme.  NCC have raised a potential concern with regard to driver compliance, that drivers may fail to yield at pinch points causing traffic to back up, inducing unacceptable delays.  In response to this concern, the Applicant has agreed to intensify the monitoring regime to facilitate early warning of issues and to work with NCC to develop correction measures to be introduced should driver compliance concerns manifest. On agreement of these measures, they will be included in an update to the Outline Traffic Management Plan [REP5-025].	There is an error in the responses provided in the Applicant's Responses to the ExA's Third Round of Written Questions [REP7-036], the correct response to Q3.14.1.5 is below:  1. The NCC grass cutting specification for visibility splays has been selected as a proxy for the timing and frequency of maintenance required for the overhanging vegetation, as no such guidance exists specific to vegetation clearance. The timings and frequency in the grass cutting specification (i.e. 5 cuts during the growing season (May to September)) will be applied to the overhanging vegetation. NCC has agreed that this satisfies their highway safety duty of care and therefore is deemed appropriate for the HIS.  NCC have been consulted and have agreed the frequency and timing of maintenance for the overhanging vegetation (based on the timing and frequency contained in the grass cutting specification) is appropriate.  2. The Applicant refers to the response to Q3.14.1.4.
Q3.14.1.6	The Applicant	HGV delivery period restrictions  Clarify the discrepancy in the HGV delivery period restrictions in the Outline Traffic Management Plan (OTMP) (Version 3) [REP5-026], between the timings set out on page 29, table 3.4 and page 38 para 122.	1.The NCC grass cutting specification for visibility splays has been selected as a proxy for the timing and frequency of maintenance required for the overhanging vegetation, as no such guidance exists specific to vegetation clearance. The timings and frequency in the grass cutting specification (i.e. 5 cuts during the growing season (May to September)) will be applied to the overhanging vegetation. NCC has agreed that this satisfies their highway safety duty of care and therefore is deemed appropriate for the HIS.  NCC have been consulted and have agreed the frequency and timing of maintenance for the overhanging vegetation (based on the timing and frequency contained in the grass cutting specification) is appropriate.  2. The Applicant refers to the response to Q3.14.1.4.	There is an error in the responses provided in the Applicant's Responses to the ExA's Third Round of Written Questions [REP7-036], the correct response to Q3.14.1.6 is below:  For Link 34, Cawston the OTMP [REP5-026] Table 3.4 sets out the following restrictions:  • 6pm to 9am and 3pm to 4pm (Monday to Friday)  Para 122 sets out the restrictions as follows:  • Prohibition of HGV deliveries during term time school pick up and drop off times (7:30am – 9:00am and 3:00pm – 4:00pm, Monday to Friday); and  • Prohibition of HGV deliveries from 6pm to 9am (in line with parking restrictions).  To clarify, the HGV restriction is no deliveries between 6pm and 9am; and no deliveries between 3pm and 4pm during school term times.
Q3.14.1.7	The Applicant	Cumulative traffic effects in Cawston The revised OTMP [REP5-026, para 125] states: "Norfolk Boreas Limited is committed to adopting the scheme under both Scenario 1 and Scenario 2 and the principle that the first project (either Hornsea Project Three or Norfolk Boreas) to proceed to	1. Yes, the Applicant will amend the OTMP [REP5-025] to add Norfolk Vanguard.  2. The Applicant will update the reference on page 7 of the Orsted SoCG [REP6-037] to reflect the latest version of the OTMP.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		<ol> <li>construction would deliver the full scheme of mitigation and the final project would be responsible for removing the measures once all project's construction phases are complete."</li> <li>In order to account for both scenarios, should the reference to the 'first project' include Norfolk Vanguard, alongside Norfolk Boreas and Hornsea Project Three?</li> <li>The joint statement in the SoCG with Orsted [REP6-037, page 7] states: "The Applicant and Hornsea Project Three (UK) Ltd have committed to the implementation of the outline scheme at The Street, Oulton, and the B1145, Cawston which would be sufficient to mitigate impacts for either the Applicant alone, Hornsea Project Three (UK) Ltd alone, or for these projects together. All of the identified measures to mitigate cumulative construction traffic impacts on shared road links will be captured in each Projects' Outline (Construction) Traffic Management Plans (OTMPs) (see document reference 8.8 of the Application, APP-699 for the Norfolk Boreas project). The details and development of the schemes are ongoing, but the scheme in principle is agreed."</li> <li>The Applicant to update the document reference for the OTMP to reflect themost recent OTMP (Version 3) [REP5-026].</li> <li>In light of the colour coding in the SoCG [REP6-037] and the final line in the above statement, set out what specific matters are still under consideration. Provide any additional information to assist the ExA in making its recommendation to theSoS</li> <li>The Applicant to consider revised wording for the dDCO: "(4) The traffic management plan referred to at sub-paragraph (1)(a) must include the final detailed scheme of traffic mitigation for impacts of the authorised development alone, and any relevant cumulative impacts identified, in respect of Link 34 as referred to in Chapter 24 of the environmental statement (Link 34). The final scheme must be approved in writing by the relevant planning</li> </ol>	<ul> <li>3. The ongoing discussion relates to the development of Cawston HIS. The Applicant has continued to liaise with Orsted during the scheme development and the latest scheme detail and RSA have been shared. However, the Applicant is awaiting formal feedback on the information from Orsted and as such the cell in the SoCG was updated to show this is 'under discussion' to reflect the current position.</li> <li>4. The Applicant has revised Requirement 21(4) to remove reference to "(Link 34)", as suggested by the ExA. This change has been made to the dDCO submitted at Deadline 7 (document reference 3.1 (version 6)).</li> <li>In relation to the suggested change to remove "relevant" ( "and any relevant cumulative impacts identified, in respect of Link 34 as referred to in Chapter 24 of the environmental statement."), the Applicant does not consider that this is appropriate for the following reasons:</li> <li>The parties are not in a position to know at this stage which of the projects referred to in the cumulative impact assessment will receive consent and proceed to construction;</li> <li>The traffic mitigation measures should be 'relevant' to the initial assessment and it would not be proportionate or reasonable to require fresh consideration of cumulative impacts post-consent and prior to submitting the final traffic management plan; and</li> <li>To view this paragraph in isolation, without reference to 'relevant', could be interpreted that the Applicant would be required to undertake further assessments and incorporate future projects that are brought forward following consent and prior to construction. Whereas the onus should and would be on the future projects undertaking a cumulative impacts can be acceptably mitigated prior to those future projects receiving consent.</li> <li>For these reasons, it is considered necessary to retain the use of the word 'relevant' within Requirement 21(4).</li> </ul>	
Q3.14.1.8	The Applicant	<ol> <li>authority in consultation with the highway authority".</li> <li>Alternative traffic movement through Cawston         <ol> <li>The Applicant to submit separate drawings for Options 2, 3 and 4 [REP5-054] for the Alternative Cawston Access Options. Provide any further information for all three options that can help understand the options as discussed with IPs.</li> <li>Does the Applicant intend to develop further any of the Options 2 or 3 or 4 or all three? What is the process for reaching an agreement between Applicant, NCC, Broadland DC and Cawston PC over Options 2 or 3 or 4 for the movement of construction traffic, and implications if no agreement reached before close of Examination?</li> </ol> </li> <li>The Applicant to respond to the concerns raised by NCC regarding Option 5 [REP5- 054] as further mitigation alongside Option 1 (current HIS). The Applicant to respond</li> </ol>	<ol> <li>Individual figures showing options 2, 3 and 4 are included in Appendix 14.1.</li> <li>In summary, there is no prospect of reaching agreement on Options 2, 3 or 4. The Applicant does not therefore propose any process, beyond that which has already been undertaken, for doing so. This is because these options are unworkable; there is already an acceptable option in place; the other options were never proposed in pre-application consultation; there is no clear reasoning for NCC's apparent change of view to permit an access off the B1149; and any alternatives would be disproportionate, given they would not apply to either Norfolk Vanguard or HP3.</li> <li>Workability</li> <li>The Applicant's position on those options, and the conclusion that it is not appropriate to take them forward, based on considerations such as construction methodology, environmental impacts, and land</li> </ol>	





Enhancing Society	ancing Society Together				
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments	
		to the concerns raised by NCC regarding Option 5 [REP5-054] as further mitigation alongside Option 1 (current HIS).	requirements (including associated changes to Order limits), is clearly set out in the Position Statement on Cawston Traffic and in response to WQ 2.14.1.6 of the ExA's second written questions.		
		<ol> <li>The Applicant to set out the possibility of using Option 5         as further mitigation alongside Option 1 (current HIS),</li> </ol>	Existing acceptable option		
		including timescales for addressing NCC's concerns, consulting with IPs, and submission into the Examination? How could this be agreed with Vanguard and Hornsea Three and secured in the DCO?	It was, and still is the case, that NCC believe that a suitable access strategy, in the form of the HIS, can be produced that acceptably mitigates all impacts, both alone and cumulatively with HP3. As explained in the response to WQ3.14.1.4 above there is no disagreement between NCC and the Applicant on the acceptability of this mitigation; the recommendations of the Road Safety Audit (RSA) have been accepted. As detailed in response to Q3.14.1.2 NCC have indicated that no further amendments are required to the HIS and there are no remaining technical objections.		
			Pre-application consultation		
			Alternatives have not previously been considered, notwithstanding extensive pre-application consultation with NCC through an evidence plan process for both Norfolk Vanguard and Norfolk Boreas. It was only at the previous Issue Specific Hearing 3 on 21 <sup>st</sup> January 2020 (ISH3) and well after the end of the examination period for both Norfolk Vanguard and HP3, that NCC's changed position appeared to enable any <i>possible</i> consideration of these options. Up until ISH3, NCC had stated that an access taken from the B1149 would not be acceptable on the grounds of highway safety and traffic management concerns.		
			The Applicant understands that NCC's change in position is as a result of the further evidence submitted by the Applicant in relation to a trenched crossing of the B1149. However, traffic management measures potentially lasting 24 months are of a different magnitude to the traffic management measures required for 2 weeks during a trenched crossing. It is also unclear why the B1149 should be subject to a trenchless crossing (acknowledging NCC have no technical objection to an open trenched crossing) given that NCC consider similar traffic management measures would enable an access to be made from the B1149.		
			NCC's apparent change of view		
			Importantly, NCC's change of view on an access from the B1149 only emerged after completion of the Norfolk Vanguard and HP3 examinations, and long after the Norfolk Boreas application was submitted. Not only would further consideration of these alternatives at this late stage be wholly at odds with the spirit and intent of the evidence plan and pre-application consultation process (which formed the basis of the scheme drawings, Order limits and environmental assessment of both Norfolk Vanguard and Norfolk Boreas); it would also be wholly at odds with the Secretary of State's policy on consideration of alternatives set out in paragraph 4.4 of NPS EN-1.		
			In particular, paragraph 4.4.3 of NPS EN-1 draws attention (among other things) to the need for proportionality in considering alternatives; the need for alternative proposals to be commercially viable and physically suitable; that, whenever possible, alternatives should be identified before an application is made; and where an alternative is first put forward by a third party after an application has been made, the onus may be placed		





PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			on the person proposing the alternative to provide the evidence for its suitability.	
			Proportionality	
			These Options do not represent a variation of the agreed HIS. They would constitute a completely new mitigation strategy from that already adopted for HP3 and for Norfolk Vanguard. This would be wholly disproportionate, particularly given that it would not mitigate any effects of Norfolk Vanguard, which would generate the majority of the traffic in the event of Scenario 1 – the most likely option where Norfolk Vanguard lays the ducting as enabling works for Norfolk Boreas. Further, in a cumulative scenario, it would not mitigate any effects of the HP3 traffic, which has yet to be profiled and has therefore been assessed at a much higher level and over a much longer period than either Norfolk Boreas or Norfolk Vanguard.	
			In conclusion, therefore, whilst there is no prospect of agreement on Options 2, 3 and 4, there is sufficient evidence before the Examining Authority, and in turn the Secretary of State, to rule out these Options. They are not appropriate alternatives to the HIS. It is not, in any event, necessary to consider these alternatives any further given that the agreed position between NCC and the Applicant is that the HIS can mitigate impacts on Cawston in an acceptable way.	
			3. and 4. The Applicant has had further discussions with NCC regarding their concerns on Option 5, confirmed as follows:	
			<ol> <li>Forward visibility at the junction of Heydon Road (Long Lane) and the B1145;</li> <li>Adequate visibility at the junction of Heydon Road (Long Lane) and Heydon Road;</li> <li>Adequate visibility at the junction of the B1149 and Heydon Road;</li> <li>Impact on amenity for non-motorised users;</li> <li>Conflict and delay with regard to the existing use by agricultural traffic; and</li> <li>Structural integrity of the route to accept the proposed HGV</li> </ol>	
			demand.  The Applicant provided updated drawings for Option 5 to NCC during a meeting on the 16 <sup>th</sup> March 2020, however NCC indicated that they do not consider Option 5 to be a suitable alternative. Had Option 5 been acceptable to NCC in principle, the Applicant would have been willing to consider it further, but this is not the case. Whilst the Applicant has explored with NCC whether it might be possible to address their concerns, and is willing to continue to do so, there is now limited scope, particularly within the examination timetable to take matters further. Ultimately, Option 5 is not required to mitigate the impacts on Cawston, as the Applicant has addressed all the recommendations made in the RSA and NCC have indicated that no further amendments are required, impacts can be mitigated acceptably by the HIS. Whilst it may now not be possible to progress Option 5, there is still a suitable mitigation strategy	
			possible to progress Option 5, there is still a suitable mitigation strategy which can be delivered in the form of the HIS.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.14.1.8	Broadland District Council	<ol> <li>Alternative traffic movement through Cawston</li> <li>The Applicant to submit separate drawings for Options 2, 3 and 4 [REP5-054] for the Alternative Cawston Access Options. Provide any further information for all three options that can help understand the options as discussed with IPs.</li> <li>Does the Applicant intend to develop further any of the Options 2 or 3 or 4 or all three? What is the process for reaching an agreement between Applicant, NCC, Broadland DC and Cawston PC over Options 2 or 3 or 4 for the movement of construction traffic, and implications if no agreement reached before close of Examination?</li> <li>The Applicant to respond to the concerns raised by NCC regarding Option 5 [REP5-054] as further mitigation alongside Option 1 (current HIS). The Applicant to respond to the concerns raised by NCC regarding Option 5 [REP5-054] as further mitigation alongside Option 1 (current HIS).</li> <li>The Applicant to set out the possibility of using Option 5 as further mitigation alongside Option 1 (current HIS), including timescales for addressing NCC's concerns, consulting with IPs, and submission into the Examination? How could this be agreed with Vanguard and Hornsea Three and secured in the DCO?</li> </ol>	1- 4. Applicant to submit	The Applicant has provided a response to Q3.14.1.8 (see above) in the Applicant's Responses to the ExA's Third Round of Written Questions [REP7-036].

#### 14.2 Cable Logistics Area (CLA) along Link 89 in Oulton

PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question	addressed to:			
Number				
			No Questions Responded to	

## 14.3 Link 69 Little London Road in North Walsham from the B1145 Lyngate Road to an access point 210m east

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments	
			No Questions		

## 14.4 Outline Access Management Plan and Access to Works Plan

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.14.4.9	The Applicant	Types of accesses  1. Distinguish between the types of accesses included in Outline Access Management Plan (OAMP) [APP-701] and the Access to Works plan [APP-011]?	The Outline Access Management Plan (OAMP) [APP-701] details the accesses which are required for the construction phase of Norfolk Boreas only. The Access to Works Plans [APP-011] include all potential access points whether they	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		<ol> <li>Provide a full list of the different types of accesses by reference to appropriate plans.</li> <li>Identify and justify all anomalies and exclusions. For instance, explain why some access routes, such as AC11, which appears to be a point of access to the onshore cable route [APP-701, para 3, bullet 3] is not in Table 2.1, and access routes such as AC131, which appears to be an access to works, is included in Table 2.1.</li> <li>Update the OAMP accordingly to include the explanations provided in 1-3 above, and any additional information as relevant.</li> <li>NCC to comment.</li> </ol>	<ul> <li>are for the construction period or for the operational period once Norfolk Boreas has been constructed.</li> <li>2. Table 14.1 provided in Appendix 14.2 details the full list of accesses as identified in the Access to Works Plans [APP-011]. Table 14.1 provides a breakdown of which accesses are required for either construction purposes or operational purposes. Details are also included of the proposed access design concepts (A, B, C or D) as detailed within the OAMP [APP-701] Section 3.3. Additional information on the Operational access types have been included.</li> <li>3. In respect to AC11, this access has the potential to be a haul road crossing access only. However, due to close proximity to the existing crossroads to the north, it is unlikely to be approved by NCC on safety grounds. Alternative access to the cable corridor can be gained at AC10 and AC12.</li> <li>4. As AC131 is identified within Table 2.1 of the OAMP and thus is included within the OAMP.</li> <li>5. It is not deemed necessary to update the OAMP at this stage as all adequate construction information on the accesses have been included in the OAMP and OTMP.</li> <li>6. NCC to comment.</li> </ul>	
Q3.14.4.10	The Applicant	Access AC 133 Swanton Morley  The ExA observed the narrow and restricted width of Access AC133 at the USI on 16 March 2020 [EV2-004].  Applicant to explain the adequacy of this access for its defined purpose.	AC133 is a right of access for operational access only as illustrated in Figure 5.4 [APP-266] and its exclusion from Table 2.1 of the OAMP [APP-701]. This access would not be used for any construction activities and provides a right of access for operations and maintenance purposes post-construction, such as inspections, which would be conducted using light vehicles.	

## 15 Water Resources and Flood Risk

## 15.0 Water Resources and Flood Risk

PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number	το.			
Q3.15.0.1	The Applicant	Hydrogeological Risk Assessment for abstractions within 250m of works:  Clarify if and how and when the dDCO and OCoCP will respond to the EA note in response to Q2.15.03 that all abstractions within 250 m of the works should be reported to the EA along with an Hydrogeological Risk Assessment rather than the current OCoCP [REP5- 010] wording of "all private water supplies within the construction area".	The Applicant proposed to update Section 6.1.2 of the OCoCP as follows to incorporate the requirements requested by the EA in response to Q2.15.0.3;  'The identification of any groundwater abstractions for public and private water supply (both licensed and unlicensed and including shallow wells) within 250m of the construction area will be identified prior to construction.  The location of private water supplies within 250m of the construction area will be identified through discussions with landowners and during the pre-construction land survey, as detailed in Appendix B.  Details of any groundwater abstractors identified along with a hydrological risk assessment for the works, a groundwater monitoring proposal if appropriate, or an evidence-based justification of the reasons	





PINS	Question is addressed	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	to:			
			why a risk assessment and monitoring are not required will be submitted to the Environment Agency prior to construction.	
			An updated OCoCP will be submitted at Deadline 8.	
			The commitment is secured though the OCoCP therefore no update to the draft DCO is required.	
Q3.15.0.2	The Applicant	ecological effects of culvert installation:  1. Provide a detailed response to the specific part of EA comment [REP5-070] to Q2.15.0.2 that the impact of ecological discontinuity caused by effects of permanent culverts (e.g. for species that do not like to move through culverts) should be compensated by enhancing marginal and in-channel habitats in the vicinity.  2. Explain how mitigation of ecological effects from installation and removal of temporary culverts is secured.  3. The Applicant to provide any additional information to assist the ExA in making its recommendation to the Secretary of State.	1. and 2. As agreed with the Environment Agency, in the event that permanent or temporary culverts are required then the identification of any appropriate mitigations with respect to ecological, or hydrological impacts, will be identified as part of the site-specific watercourse crossing plans secured under draft DCO Requirement 25. Consideration will be given to both the direct impact on any potential habitat or species using the habitat. Should enhancements be required to provide sufficient mitigation then these will be detailed and identified in the scheme crossing plans, as detailed in the OCOCP [REP5-010], secured through DCO Requirement 20; 'The Applicant has committed to develop a scheme and programme for each watercourse crossing, diversion and reinstatement, which will include site specific details regarding sediment management, and pollution prevention measures, any appropriate enhancements and post-construction monitoring.'  To provide further clarity the Applicant will further update the OCoCP to identify that the scheme will also include details of any required ecological or hydrological mitigation measures.  In addition, species specific ecological mitigation is secured through the OLEMS [REP5-023] for potentially affected species such as water voles, otters and fish including full baseline surveys and where required preconstruction surveys to confirm their presence and should any further mitigations be required in the event species are present at any of the permanent or temporary culvert locations, this will be identified and detailed in the final Ecological Management Plan, secured under DCO Requirement 24.  3. The Applicant understands that with the proposed updates to the OCoCP the Environment Agency have no further concerns on ecological impacts of permanent or temporary culverts and therefore does not feel any additional information is required.	
Q3.15.0.3	Environment Agency	Monitoring of residual adverse impacts on the water environment:  Confirm satisfaction with or comment on the Applicant's	The Environment Agency agrees that the updated OCoCP [REP5-010] which undertakes to develop a scheme and programme for each watercourse crossing does address our concerns regarding watercourse	Section 1.4 of the OCoCP does reproduce DCO Requirement 20 that 'No stage of the onshore transmission works may commence until for that stage a code of construction practice has been submitted to and
		answer [REP5-045] to Q2.15.0.11 regarding monitoring of residual adverse impacts on the water environment; in particular whether the post-construction monitoring requirement for watercourse crossings that has been covered in the updated OCoCP submitted at Deadline 5 is adequately	[REP5-010] does not reference our position that we should be consulted on relevant CoCPs. However, Requirement 20 of the DCO requires onsultation with the Environment Agency by the relevant planning	approved by the relevant local planning authority, in consultation with Norfolk County Council, the Environment Agency and the relevant statutory nature conservation body.'  The reference to Requirement 20 in Section 2.1 of the OCoCP has been underted to state the OCoCP will be developed (in consultation with
		secured to the satisfaction of EA and NE.	authority. This is referenced in the last Statement of Common Ground	updated to state the OCoCP will be developed 'in consultation with





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number				
			under Table 6 Agreement Log – Water resources and Flood Risk submitted at deadline 63.15.03. The final position for this issue is:	Norfolk County Council, the Environment Agency and the relevant statutory nature conservation body.'
			'It is agreed by both parties that the development of a CoCP in consultation with the Environment Agency is an appropriate level of pollution control, subject to the update of the OCoCP.'	
Q3.15.0.3	Natural England	Monitoring of residual adverse impacts on the water environment:  Confirm satisfaction with or comment on the Applicant's answer [REP5-045] to Q2.15.0.11 regarding monitoring of residual adverse impacts on the water environment; in particular whether the post-construction monitoring requirement for watercourse crossings that has been covered in the updated OCoCP submitted at Deadline 5 is adequately secured to the satisfaction of EA and NE.	Natural England notes the additional text included in OCoCP with regards a pre-construction survey of each crossing location. Please can the Applicant clarify if pre construction surveys will include a phase 1 survey. We would also welcome the inclusion of the term ecological enhancements, to differentiate between flood risk and sediment management enhancements.  Natural England would welcome further definition of post construction ecological monitoring to be included on the OCoCP, to include detail of what will be monitored and at what time intervals (we note that more detail was provided in the response to Ex WQ 2.15.0.11 but that this does not appear to have been incorporated into the DCO documents as yet.).	The Applicant can confirm that all unsurveyed areas, including watercourses, within the onshore project area will be subject to an Extended Phase 1 Habitat Survey prior to construction at the optimum time of the year, this is detailed in the OLEMS (see Section 9.4.3.1), secured through draft DCO Requirement 24.  Section 11 of the OCoCP has been updated to state 'hydrological and ecological mitigation measures and enhancements', an updated OCoCP has been submitted at Deadline 8 (Version 4).  As stated in Section 11 of the OCoCP the details of any post-construction monitoring at watercourse crossings will be determined on a site specific basis as part of the development of the scheme and programme for watercourse crossings, produced under Requirement 25. The information provided in response to ExA Q2.15.0.11 are typical measures, however the exact measures cannot be confirmed until details of the baseline conditions and the type of watercourse crossing are known post-consent. However, the information provided in response to ExA Q2.15.0.11 has been included in Section 11 of the OCoCP (Version 4 submitted at Deadline 8).
Q3.15.0.5	Environment Agency	Risk Assessment based on chemical testing in the ground investigation reports: Confirm satisfaction with or comment on the Applicant's response [REP6-014] to EA's comments on Q2.16.2.4 regarding Risk Assessment based on chemical testing in the ground investigation reports that showed detections of 'low level hydrocarbons which is unexpected given the land uses in the area of the crossings'; in particular whether the commitment to additional groundwater protection and undertaking more detailed hydrogeological risk assessments has been adequately covered and secured through the updated OCoCP submitted at Deadline 5 to the satisfaction of EA and NE.	The Environment Agency are satisfied with the Applicant's response [REP6-014] and that the updated OCoCP secures the proposed approach.	Noted.
Q3.15.0.6	Environment Agency	Consultation on contamination and approval of remediation: Confirm satisfaction with or comment on the Applicant's response [REP6-014] to EA's comments on Q2.16.2.5 regarding consultation and approval procedures for remediation of suspected contamination or spills, in particular the adequacy and extent of application of proposed wording for a future update of the OCoCP Section 13 Environmental Incident and Response and Contingency to include that the 'Environment Agency incident response teams must be notified where an environmental incident could cause spillage or contamination into a watercourse including drains'.	We note that Requirement 20 requires that the Environment Agency's approval must be sought for each stage CoCP. This provides the Environment Agency with a means of checking the adequacy of proposed methods and timeframes. We also note and the updated OCoCP Section 13 wording.	Noted.
Q3.15.0.7	Natural England	Definition of secondary consent bodies:  Comment on the Applicant's response at [REP6-014] to NNDC comment [REP5-067] on Q2.15.0.1 (that dDCO Requirement 25,	Natural England would wish to be consulted and are content that this is incorporated within Requirement 25 with the text 'and the relevant statutory nature conservation body', and that this commitment is	The commitment to consult with the relevant statutory nature conservation body is secured through Requirement 25 of the draft DCO [REP7-003] which states 'in consultation with Norfolk County Council, the





PINS	Question is addressed	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	to:			
Q3.15.0.8	The Applicant	in relation to watercourse crossings, refers specifically to some but not all secondary consent bodies) "all parties who would be involved in the secondary consenting associated with watercourse crossings are captured and consulted under Requirement 25, these are the Environment Agency, Norfolk County Council as Lead Flood Authority and Internal Drainage Board (captured under relevant drainage authorities)."  Attenuation capacity at substations allowance for climate	secured through para 143 of the OCoCP Version 3 D6 'This scheme will be submitted to and approved by the relevant planning authority in consultation with Natural England'.  1. At the end of the operational life of the development, an onshore	Environment Agency, relevant drainage authorities and the relevant statutory nature conservation body'.  The reference in Section 11 of the OCoCP has been updated to reflect this wording and submitted at Deadline 8 (Version 4).
		change:  The Flood Risk Assessment [APP-586] para 229 states that 'the outline drainage design' includes capacity for attenuation of 40% above that required for the 1 in 100 year event (i.e. provides a 20% margin of safety beyond a 20% allowance for climate change) but the OODP [APP-712] only refers to 20% proposed allowance for climate change, which appears to have been conceded by Norfolk CC as Lead Local Flood Authority in SoCG [REP6-035] on the basis of a 35-year operational life of the development.  The Applicant to explain:  1. how at the end of the operational life of the development the infiltration rate of the entire footprint of the project substations and the National Grid substation extension will in practice be restored to the same as the present-day and how this is secured by the DCO;  2. how risks discussed in [REP6-035] of SuDS drainage features performing sub- optimally if designed for additional capacity could be mitigated by design and management in order to maintain the 40% additional aggregate attenuation capacity during operation that was included in the FRA.  The Environment Agency, Water Management Alliance and Breckland Council are asked to comment on this proposed relaxation from the 40% figure that was included in the Flood Risk Assessment, in relation to both the project substation and the National Grid substation.	decommissioning plan must be submitted to the relevant planning authority for approval as secured in Requirement 29 of the dDCO. The onshore decommissioning plan will include details of the post-decommissioning drainage which is most appropriate at the time of decommissioning. The removal of impermeable materials and structures associated with the onshore project substation and National Grid substation extension and the return of the land to agricultural use will naturally restore the infiltration rate to present day levels.  2. The requirement to include a 20% climate change allowance was agreed with Norfolk County Council Lead Flood Authority during the Norfolk Vanguard examination, and this agreement is reflected in the Norfolk Boreas SoCG [REP6-035]. The 20% climate change allowance is not a relaxation but is the correct level of climate allowance which is required in line with Environment Agency's Climate Change Allowance Guidance.  The outline drainage design assumptions included an allowance of 40% for climate change, this was included as contingency to demonstrate proof of concept for design check purposes. In line with the EA guidance a climate change allowance of 40% is the worst-case allowance identified for developments that have a design life extending beyond 2070. The onshore project substation has a 35 year design life running from approximately 2026-2061, therefore it would not be necessary or appropriate to install a system with this level of allowance.  As detailed in the SoCG these systems are designed to receive a certain volume of water. If they are over designed and receive less water than expected there is a risk they will silt up which could lead to impacts to the sensitive chalk river catchment. The best approach to avoid any risk is to design in line with guidance with a 20% climate change allowance.  Hence, the commitment in the OODP that the surface water drainage plan will have sufficient storage / attenuation volume for a 1 in 100 year rainfall event, plus a 20% allowance for clima	
Q3.15.0.8	Environment Agency	Attenuation capacity at substations allowance for climate change:  The Flood Risk Assessment [APP-586] para 229 states that 'the outline drainage design' includes capacity for attenuation of 40% above that required for the 1 in 100 year event (i.e. provides a 20% margin of safety beyond a 20% allowance for climate change) but the OODP [APP-712] only refers to 20% proposed allowance for climate change, which	The issue of surface water is not within the Environment Agency's remit and is not an issue on which we would usually make representation. However, we do provide advice on the application of climate change allowances and make comment on that basis.  The Environment Agency's "Flood Risk Assessments: climate change allowances guidance" is published on the gov.uk website.	The Applicant is confident that the onshore infrastructure will be built and commissioned before the year 2034, as detailed in ES Chapter 5 Project Description the onshore infrastructure is proposed to be commissioned by 2028 (Scenario 1) or 2027 (Scenario 2) and the design life is 35 years. As such the drainage system designed for a 20% increase in peak rainfall intensity is in accordance with the EA's current "Flood Risk Assessments: climate change allowances" guidance.





PINS Question Number	Question is addressed	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		appears to have been conceded by Norfolk CC as Lead Local Flood Authority in SoCG [REP6-035] on the basis of a 35-year operational life of the development.  The Applicant to explain:  3. how at the end of the operational life of the development the infiltration rate of the entire footprint of the project substations and the National Grid substation extension will in practice be restored to the same as the present-day and how this is secured by the DCO;  4. how risks discussed in [REP6-035] of SuDS drainage features performing sub- optimally if designed for additional capacity could be mitigated by design and management in order to maintain the 40% additional aggregate attenuation capacity during operation that was included in the FRA.  The Environment Agency, Water Management Alliance and Breckland Council are asked to comment on this proposed relaxation from the 40% figure that was included in the Flood Risk Assessment, in relation to both the project substation and the National Grid substation.	https://www.gov.uk/guidance/flood-risk-assessments-climate-changeallowances  The guidance explains that:  The upper end climate change allowance for peak rainfall intensity up to the year 2039 requires a 10% uplift to the assessed current day peak rainfall intensity. This would apply for development lifetimes of 19 years (from a 2020/current day baseline).  For development lifetimes of up to 49 years from a 2020/current day baseline i.e. for the period 2040 to 2069, the upper end climate change allowance for peak rainfall intensity requires a 20% uplift to the assessed current day peak rainfall intensity.  For developments where the lifetime is expected to extend beyond 2070, then the upper end climate change allowance for peak rainfall intensity requires a 40% uplift to the assessed current day peak rainfall intensity.  Therefore, if the ExA are content that the proposed substation's lifetime is 35 years then the relaxation could be considered appropriate. However, if the completion/commissioning date for the sub-stations is likely to be more than 14 years from the current day/2020 baseline, then the quoted development lifetime of 35 years would extend into the "beyond 2070" climate change allowance epoch and would require the drainage system to be designed for a 40% increase in the assessed current day peak rainfall intensity.  Therefore, if both the Inspector and Applicant are confident that the infrastructure will be built and commissioned before the year 2034 and that the development lifetime is no greater than 35 years, then the drainage system could be designed for a 20% increase in peak rainfall intensity in accordance with the EA's current "Flood Risk Assessments: climate change allowances" guidance  Reference: EN-1 — Overarching National Policy Statement for Energy Section 4.8 paragraphs 4.8.6 & 4.8.11; Section 5.7 paragraph 5.75	

# 16 General

#### 16.0 General

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Q3.16.0.1	The Applicant	Climate Change:	It is the Applicant's intention to construct and operate a facility that will	
		Accepting that the Applicant has designed in accordance with UKCP18, but considering the number of extreme events which have occurred over the last few months, the	continue to generate low-carbon energy for a period of 25-30 years.  Given the extent of the financial investment required to establish this	
		Applicant to expand on its response to Further Written	facility, it is in the Applicant's own interests (as well as those of UK energy	
		Question 2.16.0.1 [REP5-045] to provide assurance that	users) to ensure that all elements of the project are able to withstand	
		adaptation for offshore, landfall and onshore elements of the proposed project will be resilient to climate events	extreme weather events over this projected operational lifetime. Failure	





Enhancing Society				
PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
		more extreme than those considered in UKCP18.	to do so would entail significant financial risk to the Applicant, and could result in failure to recoup the initial investment.	
			The Applicant is confident that the proposed siting and routing of the project infrastructure provides for a design with adequate resilience to expected climate trends.	
			Specific examples include:	
			At the onshore project substation, where the capacity of the attenuation ponds has allowed for the required 1 in 100 year event plus 20% climate change allowance.	
			The design of the cable landfall provides a further onshore example: the degree to which the Transition Joint Bays will be 'set back' from the beach and cliff-line is a minimum of 125m, with flexibility to set back up to 325m, sufficient to accommodate not only the most up to date information and forecasts of coastal erosion (currently predicted to be between 50m and 110m by 2065) but also beyond. This will also be informed by predictive models of coastal processes, together with data from periodic surveys of the coastline at the landfall location.	
			All offshore infrastructure is designed against standards that require the structures to withstand the conditions to which they are exposed for their entire lifetime. These standards include extreme events, with a return period of 50 or 100 years in the design process, and the projected changes caused by climate change.	
			There is an innate conservatism in the standards used for design, to ensure that structures are designed to withstand conditions that they will be exposed to over their lifetime. This conservatism includes:	
			<ul> <li>choosing the most extreme conditions across the site for design purposes;</li> <li>using a 50 or 100 year return period event for in design, even though the life time of the wind farm is 30 years;</li> <li>using higher Representative Concentration Pathway <sup>4</sup> scenarios when deciding on applying uplifts due to climate change to parameters such as sea level rise, sea temperature and air temperature.</li> <li>Where, parameters have a high certainty of change (e.g. sea water temperature), these changes are captured in the design of offshore</li> </ul>	
			infrastructure.	
			Where predictive models like this are used to inform detailed design, any relevant effects of known climate trends (such as sea level rise) would be included in the scope of the model. The Applicant will work closely with	
			its advisers and consultants to ensure that these effects are properly	

<sup>&</sup>lt;sup>4</sup> a way of categorising different emissions scenarios. They range from RCP2.5, which is rapid decarbonisation and sharp fall in emissions, to RCP 8.5, which is a continued growth in global emissions.





PINS	Question is	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Question Number	addressed to:			
Number			understood and quantified with reference to state of the art climate	
			understood and quantified, with reference to state-of-the-art climate projection tools such as UKCP18.	
			projection tools such as over 16.	
Q3.16.0.2	The Applicant	Sulfur hexafluoride (SF6):	Sulphur hexafluoride (SF6) is used as a high-performance insulating	
		SF6 is the most powerful of the greenhouse gases. The	medium in some types of high-voltage equipment, such as switchgear.	
		Applicant to provide a statement detailing the use of SF6	The use of SF6 insulation permits more compact component designs and	
		in the project and how leaks of SF6 will be avoided.	arrangement of equipment, as the spatial separation between live	
			conductors and grounded structures can be much lower than is the case	
			where conventional 'open terminal' technology is used. For this reason,	
			compact Gas Insulated Switchgear (GIS) is often used in applications	
			where space is limited, or where the cost of providing space is at a	
			premium.	
			It is well-known that SF6 is an extremely powerful greenhouse gas; it is	
			also highly toxic. In order to control the environmental and safety risks	
			associated with the use of SF6, equipment suppliers have worked	
			together with industry bodies and national regulators to develop	
			comprehensive guidance on the operation and servicing of equipment	
			that contains the gas. Examples of such guidance include:	
			DEFRA/EA Guidance "How to operate or service high voltage	
			switchgear containing SF6", available at	
			https://www.gov.uk/guidance/how-to-operate-or-service-high-	
			voltage-switchgear-containing-sf6	
			CIGRE WG 23-02, "Guide for SF6 gas mixtures", CIGRE technical     Assessed 2000, asset letter (Assessed in the Company of	
			brochure 163, August 2000, available via http://www.cigre- sc23.org/publications	
			<ul> <li>CIGRE WG 23-10, "SF6 recycling guide", ELECTRA 173 (1997), 43-</li> </ul>	
			69	
			In addition, some equipment suppliers are developing GIS products that	
			do not require the use of SF6. These products generally use alternative	
			gas mixtures with insulating properties that do not perform their function	
			as well as SF6. As such, it is not always possible to achieve the same	
			degree of 'compact design' as a functionally equivalent SF6-based	
			product.	
			Where switchgear needs to be deployed on offshore structures, the	
			choice of whether to use GIS technology is strongly influenced by two	
			considerations. Firstly, the switchgear has to be enclosed to protect it	
			from the elements, in particular from the moist, salt-laden air. Secondly,	
			the switchgear – and its protective enclosure – has to be supported at a	
			height of 40-50m above the seabed. Given these considerations, the	
			compact physical characteristics of GIS typically lead to significant savings	
			in overall material requirements, impacts and costs.	
			In the Norfolk Boreas project, high-voltage switchgear will be deployed	
			and operated at a number of different locations:	
			At each wind turbine	





PINS Question	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
Number	addressed to:			
			<ul> <li>At the offshore converter stations</li> <li>At the onshore converter station</li> <li>At the point of connection to the National Grid (NG Necton substation)</li> </ul>	
			The switchgear at the wind turbines and at the offshore converter platforms will be Gas Insulated Switchgear (GIS). The GIS on the converter platforms will use SF6, as there are currently no SF6-free products that can deliver the required electrical functionality (e.g. high load currents and/or high voltage ratings). The GIS at the turbines will operate in the 'medium-voltage' range (at 66kV), and the required load currents are not particularly high (800-1000A). It is quite possible that suitable SF6-free switchgear products will available for Norfolk Boreas, prior to its construction. While the Applicant would welcome such a development, the selection of a SF6-free solution for use in the project would depend on the supplier meeting our technical and commercial requirements.	
			The high-voltage switchgear at the onshore converter station and the National Grid extension at Necton will be conventional Air Insulated Switchgear (AIS) which will contain SF6. The servicing and operation of this equipment will at all times follow the comprehensive guidance developed by industry bodies and national regulators as referenced previously.	
			<ul> <li>Given the undesirable environmental effects of SF6, the Applicant will put in place appropriate controls to eliminate as far as possible any potential leakage from GIS equipment containing the gas. Although the details of these control measures are not yet determined, some general principles are outlined below:The system of controls will meet and exceed the guidance provided by the UK Government (DEFRA/EA Guidance referenced above)</li> <li>The system of controls will be developed following a thorough review of other relevant guidance (eg. CIGRE WG 23-02).</li> </ul>	
			<ul> <li>The Applicant will also draw on experience with GIS equipment in other parts of Vattenfall.</li> </ul>	
Q3.16.0.3	The Applicant	Norfolk Vanguard Offshore Wind Farm responses to the Secretary of State's consultation letter dated 6 December 2019  Submit anything from the Norfolk Vanguard Offshore Wind Farm responses to the Secretary of State's consultation letter dated 6 December 2019, published on the National Infrastructure Planning website, which is considered relevant to this Examination, and not already submitted, with an explanation of why it is of relevance.	The Applicant has had due regard to all responses to the Secretary of State's consultation letter and considers that only documents which the Applicant wish to directly draw upon as evidence should be submitted to the Norfolk Boreas Examination. Therefore, at Deadline 7 the Applicant has submitted the "Environmental assessment of trenchless crossing at the B1149" which was provided by Norfolk Vanguard Limited in response to the SoS letter. This document, as provided to the SoS, is directly relevant to Norfolk Boreas and has thus been submitted as document ExA.AS-3.D7.V1. No further Norfolk Vanguard documents have been submitted for Deadline 7.	





PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			Further documents may be submitted at future Deadlines however these will always be relevant to the materials submitted at that deadline and will be submitted in the context of the Norfolk Boreas project.	
Q3.16.0.3	Marine Management Organisation	Norfolk Vanguard Offshore Wind Farm responses to the Secretary of State's consultation letter dated 6 December 2019  Submit anything from the Norfolk Vanguard Offshore Wind Farm responses to the Secretary of State's consultation letter dated 6 December 2019, published on the National Infrastructure Planning website, which is considered relevant to this Examination, and not already submitted, with an explanation of why it is of relevance.	The MMO submitted the following document in response to the SoS letter: EN010079-004198-MMO-reponse-to-Vanguard-SOS-letter-Final. This has been attached as part of the Deadline 7 response for review. The MMO notes that the response to each relevant point for Norfolk Vanguard has also been provided within the MMO's response to Examiners Second Round of written Questions and the MMO's written representations during Examination.  Any further information provided to the Norfolk Vanguard Project team will be included in the Norfolk Boreas Examination.	The Applicant notes this submission. The Applicant considers that all relevant information within this document has already been addressed through the Norfolk Boreas Examination and it raises no additional areas of disagreement.

# 16.1 Environmental Statement (ES)

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments
			No Questions	

## 16.2 Ground conditions and contamination

PINS Question Number	Question is addressed to:	Question:	Interested Parties' Response at Deadline 7:	Applicant's Comments	
			No Questions		