

Norfolk Boreas Offshore Wind Farm Applicant's Comments on Deadline 13 Submissions

Applicant: Norfolk Boreas Limited
Document Reference: ExA.ASR.D14.V1
Deadline 14

Date: August 2020
Revision: Version 1
Author: Royal HaskoningDHV

Photo: Ormonde Offshore Wind Farm

Date	Issue No.	Remarks / Reason for Issue	Author	Checked	Approved
20/08/2020	01D	First draft for internal review	CD/EV/DT/PG	VR	JL
25/08/2020	01F	Version for submission at Deadline 14	CD/EV/DT/PG	JL	JL



Table of Contents

1	Applicant’s Comments on Deadline 13 Submissions	1
1.1	REP13-027, Cawston Parish Council	2
1.2	REP13-030, Mulbarton Parish Council.....	10
1.3	REP13-032, North Norfolk District Council	11
1.4	REP13-034, Eastern IFCA’s Response to Rule 17 - Final position on compensatory measures	11
1.5	REP13-035, MMOs Post hearing submission, response to Rule 17 and Appendix 1 Southern North Sea Activity Tracker.....	11
1.6	REP13-037, National Farmers Union	12
1.7	REP13-038, Natural England’s Response to Rule 17	16
1.8	REP13-039, NSAG (Offshore transmission connections review).....	17
1.9	REP13-040, NSAG (Connection point)	18
1.10	REP13-041, NSAG (Survey article).....	18
1.11	REP13-042, NSAG (Rochdale Envelope)	19
1.12	REP13-043, NSAG (Health receptors).....	20
1.13	REP13-044, NSAG (HVDC transmission)	21
1.14	REP13-045, NSAG (Cumulative Effects)	21
1.15	REP13-046, NSAG (Red Kites)	21
1.16	REP13-047, NSAG (Land take).....	22
1.17	REP13-048, Network Rail.....	23
1.18	REP13-049, RSPB’s Response to Rule 17	23
1.19	REP13-050, Chris Allhusen	24
1.20	REP13-051, Polly Brockis	26
1.21	REP13-052 Colin King.....	26
1.22	REP13-053, Colin King (Late submission).....	27
2	References	28

Glossary of Acronyms

AEol	Adverse Effect on Integrity
AIL	Abnormal Indivisible Load
ALO	Agricultural Liaison Officer
BEIS	Department for Business, Energy & Industrial Strategy
CPC	Cawston Parish Council
DAS	Design and Access Statement
DCO	Development Consent Order
dDCO	Draft Development Consent Order
DML	Deemed Marine Licence
ECow	Ecological Clerk of Works
EIA	Environmental Impact Assessment
EIFCA	Eastern Inshore Fisheries and Conservation Authority
EMP	Ecological Management Plan
ES	Environmental Statement
EU	European Union
ExA	Examining Authority
HDD	Horizontal Directional Drilling
HGV	Heavy Good Vehicle
HHW	Haisborough, Hammond and Winterton
HIS	Highway Intervention Scheme
HP3	Hornsea Project Three
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
ISH	Issue Specific Hearing
LIG	Land Interest Group
MMO	Marine Management Organisation
NCC	Norfolk County Council
NE	Natural England
NFU	National Farmer's Union
NSAG	Necton Substation Action Group
OCoCP	Outline Code of Construction Practice
OFH	Open Floor Hearing
OLEMS	Outline Landscape and Ecological Management Strategy
OTMP	Outline Traffic Management Plan
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SIP	Site Integrity Plan
SoCG	Statement of Common Ground
SUV	Sport Utility Vehicle
TMP	Traffic Management Plan
UK	United Kingdom

1 Applicant's Comments on Deadline 13 Submissions

1. This document contains the Applicant's comments on submissions by Interested Parties at Deadline 13 of the Norfolk Boreas Examination which raise matters which had not already been in addressed in the Applicant's previous submissions to the examination.
2. Please note that the Applicant has responded to the matters raised in the following post hearing submissions submitted at Deadline 13 in the Applicant's Response to Open Floor Hearing 2 [REP13-014] and the Applicant's Response to Open Floor Hearing 3 [REP13-015] and therefore have not been responded to in this document:
 - REP13-028, REP13-031, REP13-033, REP13-036, REP13-054.

1.1 REP13-027, Cawston Parish Council

Summary of Submission	Applicant's Comments
<p>In REP13-027 Cawston Parish Council (CPC) include points made in their oral submissions at Open Floor Hearings 2 and 3 and report on the meeting with Vattenfall held on the 21st July 2020.</p>	<p>The Applicant has provided a response to the matters raised by CPC during the Open Floor Hearings (OFHs) in the Applicant's Response to Open Floor Hearing 2 [REP13-014] and the Applicant's Response to Open Floor Hearing 3 [REP13-015]. These include responses to the additional traffic related requirements within the Norfolk Vanguard as made DCO; the revisions made to, and the application of, the Highway Intervention Scheme (HIS) across projects, and Cawston Alternatives including suggestions that engagement has been disingenuous.</p> <p>Furthermore, a number of matters raised at the OFHs were also discussed at the meeting between the Applicant and CPC on the 21st July 2020 and the Applicant refers to the Position Statement on the meeting with Cawston Parish Council [REP13-019] which includes the Applicant's response to the following matters;</p> <ul style="list-style-type: none"> • Confirmation of HIS across projects; • Hornsea Project Three commitment on working hours and Abnormal Indivisible Loads (AILs); • Reduction in car parking; • Accident data; • 20 mph zones/speed limits; • Monitoring and Compliance; • Wing Mirrors; • Platooning; • Concerns over entrance and egress onto B1145 from properties; • Additional mitigation measures; • Community benefit; • Confirmation on construction programmes. <p>As the Applicant has previously provided a detailed response on these topics [REP13-019] they are not repeated here. However there are a number of points raised by CPC in</p>

Summary of Submission	Applicant's Comments
	<p>REP13-027 not raised at the meeting and therefore clarification on these is provided below, along with any updates to the previously made positions.</p>
<p>CPC refer to the recommendations of the Vanguard ExA Report and question whether revisions have been made to improve the scheme and whether HGV numbers have been further reduced. On HGV numbers, CPC states that the only suggestion of reducing them is on review after the scheme fails.</p>	<p>The Applicant refers to the Applicant's Written Summary of the Applicant's Oral Case at Issue Specific Hearing 5 [REP13-016], Agenda item 4 e) where an explanation of the Norfolk Vanguard amendments is provided, including that;</p> <p><i>Significant revisions have been made to the HIS, subsequent to the HP3 and Norfolk Vanguard examinations, during the course of the Norfolk Boreas examination. The HIS has been subject to a number of design revisions, has passed a Road Safety Audit, addresses driver compliance and is agreed with NCC as appropriate to mitigate cumulative impacts. Therefore, in terms of the introduction of physical mitigation in the form of highways infrastructure, the scheme design has been finalised.</i></p> <p><i>Notwithstanding the evolution of the HIS during the Norfolk Boreas examination, the Applicant recognises the concerns on cumulative impact raised by the ExA for Norfolk Vanguard. The Applicant is mindful that traffic impacts have been assessed very much on a worst case basis, and it has always been the intention to refine and manage cumulative HGV numbers post consent in line with construction methodologies and programmes. On that basis, the Applicant proposes to adopt the wording within paragraph (4) of Requirement 21 and the Applicant has included this in version 8 of the dDCO submitted at Deadline 13. However, in doing so, the Applicant considers that it would be of assistance to include a further explanation in the OTMP as to the scope of the 'revised details' and what form this might take, bearing in mind that no further physical changes are proposed to the HIS and therefore that this would focus on the reduction of cumulative HGV numbers (as suggested by the Norfolk Vanguard ExA) as further information on the HGV profiles and peaks becomes available.</i></p> <p>As stated in the Applicant's response to the ExA's fifth written questions Q5.14.1.1 [ExA.WQ-5.D14.V1] the Applicant has updated the OTMP to commit to reduction of cumulative HGV movements on Link 34 through Cawston at the pre-construction stage (but post consent) as part of the development of the final TMP and subsequent discharge of Requirement 21 of the dDCO. The OTMP (Version 6) submitted at Deadline 14 has been updated to include the following as paragraph 129 in Section 4.3.2 for Link 34 Cawston;</p> <p><i>"No further physical changes are proposed to the HIS, however as secured through Requirement 21 (4) 'revised details' in the form of a reduction in the cumulative HGV peak</i></p>

Summary of Submission	Applicant's Comments
	<p><i>from 239 by ensuring Norfolk Boreas and Hornsea Project Three peak traffic demand does not overlap, will be captured in the final TMP. The extent of the reduction will be determined post-consent when construction methodologies are refined and detailed construction programmes are developed."</i></p> <p>The Applicant has continued to engage with HP3 throughout the development of the HIS. Following the closure of the HP3 examination, HP3 has progressed profiling of HP3's traffic demand through Cawston and has provided a technical note to the Applicant which sets out the revised HGV traffic movements through Cawston [ExA.AS-4.D14.V1]. This note, includes a commitment to a 'staggered' construction programme over an 11 month period for which results in the refinement of impacts for HP3 traffic flows (alone):</p> <ul style="list-style-type: none"> • The duration of works HP3 traffic flows in Cawston will be 11 months; • The peak construction HGV total of 127 daily movements would occur for a maximum of one month; • Significantly reduced HGV demand for 10 months of the 11 month construction duration (which would include a secondary peak of 68 daily HGV movements and a 9 month average of 62 daily HGV movements). <p>This demonstrably, re-affirms that the Norfolk Boreas and HP3 HGV peaks can be managed post-consent so as to not overlap (e.g. respective project HGV primary peaks have a duration of only one week and one month) to reduce potential cumulative impacts.</p>
<p>Inadequate Road Space</p> <p>CPC continue to raise concerns over wingmirrors, including that the Applicant has suggested that the additional width of mirror is an additional 80mm and CPC suggest 350mm is more representative. They also makes reference to width of light vehicles/vans (source Google) and suggest there is inadequate provision for such vehicles with wing mirrors within a 5.0m wide road space.</p>	<p>At the meeting held on the 21st July 2020 with CPC [please refer to REP13-019] the Applicant reconfirmed the position set out at Deadline 10 that the maximum dimensions are a 2.55m HGV with a 250mm maximum projection of the wing mirror from the body or trailer, and this is the widest projection permitted under EU/UK legislation and that this is what has been included in the swept path analysis. The Applicant acknowledged that a wing mirror itself could be measured at 350mm, due to the tapering of the cab but the projection from the body can only be 250mm in accordance with legislation. Therefore, the maximum vehicle width would be 3.05m.</p> <p>The same legislation requires the wing mirrors to be adjustable from the driver's seat in the event that an obstruction is encountered. It is stressed that the Applicant views this as a contingency rather than a basis for the HIS design.</p> <p>There is a short section of the scheme in the vicinity of No.10 High Street that narrows to just over 5m wide after which the carriageway alignment flares out to an average of ~</p>

Summary of Submission	Applicant's Comments
	<p>5.6m wide. A private car in the UK measures in the range of 1.7m (compact hatch back) to 1.9m (large SUV). The HIS parking bays are sized similar to those applied to resident parking schemes and define a 2m wide box to encourage efficient use of road-space.</p> <p>The CPC figures quoted are for a large SUV with both wing mirrors fully extended. The parking bays are sized to encourage parking close to the kerbline (a behaviour that can be observed in current conditions) thus negating the influence of the wing mirror on the HGV path.</p> <p>In addition to horizontal dimensions, it is also important to understand the three-dimensional space that wing mirrors occupy. A HGV wing mirror is designed for a 2m eye height and a car at just over a metre. This means that the wing mirrors do not occupy the same space, and this effectively provides a further buffer zone between HGVs and parked vehicles. This concept can be observed on a daily basis as the background HGVs and Buses traverse through the High Street.</p> <p>Available road space was at the forefront of the independent road safety recommendations all of which have been addressed by the finalised HIS [detailed in the Revised HIS Road Safety Decision Log REP5-055]. It is therefore reiterated that the scheme meets the design principle of providing adequate road space for HGVs to traverse the High Street without the requirement to mount or project over the pavement.</p>
<p>HGV Conflicts</p> <p>CPC suggest that the HIS fails to consider non-windfarm related traffic and provides an example of circumstances in which the HIS will not work with reference to Booton Lane junction.</p>	<p>The HIS design has been informed by validated background traffic surveys, the published Hornsea Project Three traffic demand and the Norfolk Boreas traffic forecasts. The basis of design is for managed Norfolk Boreas arrival rates and randomised arrival rates for other background traffic. The design contains sufficient tolerance to accommodate daily traffic fluctuations and is robust in this respect.</p> <p>The 'blocking back' concern at Booton Lane was recognised by the Applicant early in the HIS development and the eastbound B1145 approach to Booton Lane was modified from the original HP3 design, to accommodate additional HGV queuing and thus build more resilience to potential blocking back events. The Deadline 4 Technical Note 'Revised Cawston HIS' [REP4-016] details the re-configuration of the parking in the High St informed by CPC's kerbside capacity parking surveys, allowing the removal of two parking bays in the vicinity and thus creating the space for additional queuing capacity.</p> <p>Drawing TP-PB5640-DR018 in Appendix 6 OTMP Version 5 [REP10-019] details three tipper HGVs positioned in the waiting area adjacent to Booton Lane. This is illustrative</p>

Summary of Submission	Applicant's Comments
	<p>only for the purpose of showing HGV waiting capacity and worst case swept paths, it is not intended as a depiction of forecast HGV arrival rates. The 50m forward visibility referred to by CPC is the total clear visibility not the required safe visibility. A 26.7m HGV stopping distance can be derived from UK design standards including driver reaction time. It provides a robust proxy for the minimum driver distance to judge the road ahead and manoeuvre accordingly. For the scenario CPC refer to this would afford adequate time for a driver to judge the end of a queue and come to a stop at a place that will not obstruct approaching traffic.</p> <p>All UK standards are based on dry weather conditions. The Highway Code supplements these standards by directing drivers to slow down in inclement weather conditions.</p> <p>Further assurance against the occurrence of blocking back is set out in the OTMP [REP10-016], which makes a commitment to driver information packs which identify safe pull-over areas for HGV drivers to let slow moving platoons pass.</p> <p>NCC have agreed to the principle of developing these areas just outside the Cawston Village extents ensuring that appropriate width/length and forward visibility is provided. NCC have further agreed the principle that these areas would be developed pre-commencement when the HGV fleet composition would be refined and secured via a Section 278 Agreement and included in the final Traffic Management Plan.</p> <p>A review of the network indicates there are potential sites on the eastbound and westbound approaches to the HIS on the outskirts of Cawston with an approximate minute journey time to the High Street. This short journey time limits the chance of a further platoon building up as the HGV continues on its journey following a pull-over manoeuvre.</p> <p>The Applicant therefore reaffirms the ES traffic and transport cumulative impact assessment [APP-237] conclusion that the HIS mitigates the potential for significant driver delay through Cawston.</p>
<p>Communications</p> <p>CPC consider that until now the Applicant ignores or rejects constructive suggestions it does not want to hear and has a long way to go to ensure effective and open communication with the local community.</p>	<p>The Applicant is committed to continued engagement with all local communities, the Applicant will take on board feedback and consider any lessons which can be learnt and look to ensure any engagement is as effective and constructive as possible. Throughout the examination the Applicant has continued to fully consider and responded to all concerns raised by Cawston Parish Council and its residents, this has included for example an assessment of proposed alternatives [REP5-045] and most recently investigation of</p>

Summary of Submission	Applicant's Comments
	<p>concerns raised over entrance and egress from properties (please refer the response to ExA fifth written question Q5.14.1.1 for further details).</p>
<p>Interaction with Hornsea 3 and Abnormal Indivisible Loads</p> <p>CPC note that HP3 is committed to adopting the latest HIS and is committed to ongoing engagement however HP3 have failed to response to CPC enquires about AILs.</p>	<p>The Applicant refers to the Applicant's response to OFH2 [REP13-014] Item 2, where it stated;</p> <p><i>'In respect of the clarification on abnormal loads, the Applicant confirms that no Abnormal Indivisible Loads (AILs) will be taken through Cawston as part of the Norfolk Boreas project. The Applicant and NCC did indicate at the meeting on the 12th February 2020 that based on the weight and width restrictions secured in the HP3 Construction Traffic Management Plan [HP3 REP10-048] (paragraph 2.1.3.6), which indicates that AILs as defined by 'The Road Vehicles (Authorisation of Special Types) (General) Order 2003' would not be utilised, the Applicant's understanding was that HP3 were not using AILs through Cawston. The Applicant is engaging with HP3 to confirm their requirements with respect to AILs through Cawston.'</i></p> <p>The Applicant has engaged with HP3 to confirm their commitment with regards to AIL and subsequently HP3 have produced a Technical Note on Cawston Traffic [ExA.AS-4.D14.V1] , which the Applicant has submitted to the examination at Deadline 14.</p> <p>In the Technical Note [ExA.AS-4.D14.V1] HP3 have <i>'confirmed a 3.3m diameter cable drum would be largest drum to travel through Cawston'</i>, this aligns with their commitment in the HP3 Outline Construction Traffic Management Plan [HP3 REP10-048] paragraph 2.1.3.6 which states <i>'No HGV movements greater than 44 tonnes, or greater than 3.3 m in width will be permitted on Link 88 and 89: B1145 (through Cawston)'</i>. This proposed cable drum would be transported by a HGV which would not be defined as an AIL under 'The Road Vehicles (Authorisation of Special Types) (General) Order 2003'.</p>
<p>Meeting with the Applicant on 21st July 2020</p> <p>CPC provide their account of the meeting and the topics discussed.</p>	<p>The Applicant acknowledges that REP13-027 documents CPC's understanding of the meeting. However, the Applicant provides the following clarifications;</p> <ul style="list-style-type: none"> • The Applicant did not 'make clear' that the diversion routes proposed were never real alternatives. As stated, the above and detailed in the Position on Cawston Traffic [REP5-054] the Applicant fully considered the alternatives which were raised by CPC in ISH3, as requested by the ExA. During the meeting on the 21st July 2020 the Applicant reaffirmed, during discussion about the implementation of the HIS across all projects, that the alternative options 2, 3 and 4 could not be

Summary of Submission	Applicant's Comments
	<p>accommodated by Norfolk Vanguard (or HP3) and therefore could not be applied to mitigate cumulative impacts.</p> <ul style="list-style-type: none"> The Applicant has made a commitment to not taking AILs through Cawston, however this is not an underlying assumption of the HIS. Please see the response above with regards to the HP3 position on AILs. Reference is made to Broadland District Council having estimated the magnitude of noise change in the short term being around 4dB. The Applicant is not aware of these estimations made by Broadland District Council. However, the Applicant refers to the assessment undertaken on potential noise effects in Cawston [REP8-028] which the Applicant has undertaken in accordance with the available appropriate guidance and methodology, as previously agreed with Broadland District Council, which concluded with <i>'the implementation of the revised HIS, along Link 34 at Cawston will result in change of minor magnitude (no greater than +1.9db). A change of minor magnitude on a medium sensitivity (residential) receptor results in a Minor adverse impact, and therefore will not have a significant effect.'</i> <p>The Applicant refers to the Response to the Request for Further information submitted at Deadline 14 [ExA.PD.D14.V1] and that notwithstanding the above, the Applicant is aware that Broadland District Council do have concerns regarding potential noise effects associated with road traffic through Cawston during the onshore construction works, particularly relating to the potential cumulative traffic flows with Hornsea Project Three. As such the Applicant has made an commit in the updated OCoCP (Version 6, submitted at Deadline 14) to a scheme of noise monitoring which will form part of the Construction Noise Management Plan (CNMP) developed as part of the final CoCP in consultation with Broadland District Council, which will be submitted to and approved by them prior to construction under Requirement 20.</p> <ul style="list-style-type: none"> Regarding engagement with all three projects, to clarify the Applicant has engaged with all relevant parties throughout the examination process (CPC, Broadland DC, NCC, Norfolk Vanguard, HP3). However, as the different projects (Norfolk Vanguard, Norfolk Boreas and HP3) are at different stages of their applications for development consent it has not been appropriate to have a meeting across all projects. Notwithstanding this, as previously stated, should all projects receive consent and proceed to construction then meetings with all projects will be undertaken as appropriate.

Summary of Submission	Applicant's Comments
<p>In the notes of the meeting CPC provided further information on accidents, 20mph zones and practical concerns of entrance and egress onto the B1145.</p>	<p>In REP13-019 CPC have provided further information which was not raised in the meeting, therefore the Applicant provides a response to these further submissions below;</p> <p>Accidents</p> <p>Adopted best practice¹ for road safety investigation in the UK focuses upon understanding how and where collisions have historically occurred in order to ensure that improvements are targeted at sites where there is a history of collisions (rather than perceived risk) and that intervention measures are appropriate to the type of collisions that have occurred.</p> <p>The Government's Transport Assessment Guidance directs² "an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent 3-year period, or 5-year period if the proposed site has been identified as within a high accident area"</p> <p>In order to inform potential future road safety impacts it is typical to consider historic collision numbers, locations and trends to form a view upon future trends. For example, where there is a pattern of right turning collisions at a junction, it can be reasoned that increases in traffic through this junction could exacerbate this existing issue.</p> <p>This 'collision cluster' approach is evidenced in the ES Chapter 24 Traffic and Transport, [APP-237] which reviewed collision data for the most recent 5-year period for the entire topic study area. Table 24.41 identified no pattern of collisions for Cawston and it was therefore assessed there would be no significant impact as a result of additional construction traffic. The collision data was revisited in the Revised Highways Intervention Scheme Road Safety Audit Decision Log [REP5-055] examining the collision causation factors, which served to further evidence that there is not an inherent road safety risk in Cawston.</p> <p>There is no commonly accepted methodology for predicting the numbers of collisions that may occur as a result of changes in traffic flows. The number of variables (both beneficial</p>

¹ Accident Investigation and Prevention, ROSPA, 2016

² Guidance: Travel Plans, Transport Assessments and Statements, Ministry of Housing, Communities and Local Government, 2014

Summary of Submission	Applicant's Comments
	<p>and negative) are difficult to forecast however, published Government Data indicates a continuing trend of decreasing casualties despite increases in traffic.</p> <p>It is therefore implicit in road safety practice that an increase in traffic does not necessarily heighten the road safety risk and more targeted interventions (such as the HIS) achieves improved road safety outcomes.</p> <p>20mph Zones</p> <p>The Applicant has provided a detailed response on 20mph zones in response to the Applicant's comments on Deadline 6 submissions and other submissions [REP7-106], section 1.2, which refers to guidance issued from the Royal Society for the Prevention of Accidents, in 2017 on the effectiveness of the 20mph zones. This guidance post-dates the abstract research published in 1993 referred to by CPC and better reflects the approach to collision prevention in the UK.</p> <p>Practical concerns of entrance and egress onto the B1145</p> <p>The Applicant refers to the Applicant's responses to the ExA's fifth written questions Q5.14.1.1 [ExA.WQ-5.D14.V1] where the Applicant has provided details on the discussion regarding the safe entrance and egress onto the B1145. The Applicant has produced a Technical Note on Access and Egress onto the B1145 which summarises the information which was shared the resident and includes copies of drawings of the entrance [ExA.AS-5-D14.V1] provided both at the meeting and in response to further queries after the meeting.</p>

1.2 REP13-030, Mulbarton Parish Council

The Applicant refers to the response to ExA fifth written questions [ExA.WQ-5.D14.V1] Q 5.4.0.10 where it has provided comments on the North Norfolk District Council Deadline 13 submission.

1.3 REP13-032, North Norfolk District Council

The Applicant refers to the response to ExA fifth written questions [ExA.WQ-5.D14.V1] Q5.13.2.1 where it has provided comments on the North Norfolk District Council Deadline 13 submission.

1.4 REP13-034, Eastern IFCA's Response to Rule 17 - Final position on compensatory measures

Summary of Submission	Applicant's Comments
<p>The EIFCA has commented on the responses provided by the Applicant to the EIFCA's Deadline 10 submission [REP10-055]. REP10-055 is the EIFCA's comments on compensatory measures put forward by the Applicant for the HHW SAC [REP11-014], should these be required. The main points raised in REP13-034 are as follows:</p> <ul style="list-style-type: none"> • Concerns regarding the eventual size of any extension to the HHW SAC. • The requirement for further engagement with the EIFCA and discussions around the Applicant supporting the EIFCA in its increased workload. • Further assessment of the possible impacts that the extension would have. 	<p>The Applicant notes the EIFCA's responses which in general reiterate the original concerns outlined in REP10-055, which the Applicant considers have now been addressed as far as possible. The Applicant does not consider that any new points are raised by the EIFCA within REP13-034 and therefore does not consider that a detailed line by line response is necessary as that would largely be to repeat the Applicant's original responses within REP11-008. However, the Applicant's general position in response to the points raised is as follows:</p> <p>The Applicant maintains that although indicative sizes for an extension have been provided within the derogation documents [REP11-014], the exact size can only be fully determined once the SoS's Appropriate Assessment has been completed, the detailed design of the cable route and cable protection requirements is known and following further consultation with all the relevant parties, especially those who would have management responsibilities for the extension. Only once the size of the extension has been determined can further discussions be had on the appropriate level of support provided by the Applicant to EIFCA and other relevant parties.</p>

1.5 REP13-035, MMOs Post hearing submission, response to Rule 17 and Appendix 1 Southern North Sea Activity Tracker

Summary of Submission	Applicant's Comments
<p>The MMO provides a summary of its Oral Case made during the Draft Development Consent Order and other matters Issues Specific Hearing (ISH4)</p>	<p>The MMO's summary of their evidence provided during ISH4 is noted. In particular, the Applicant notes that the MMO are in agreement with the Applicant on all points apart from the fact that the MMO would prefer the HHW SIP and Grampian condition to be removed as an option. As previously explained, the Applicant wishes to retain its inclusion as an option for the SoS, in the event that the SoS</p>

Summary of Submission	Applicant's Comments
	<p>determines that the final condition should be consistent with the Norfolk Vanguard as made DCO or that a Site Integrity Plan is required in this particular case as an additional safeguarding mechanism.</p> <p>The Applicant notes that the MMO welcomes the removal of the appeals procedures from the DMLs and the DCO and understands this will be reflected in the MMO's response to the fifth round of written questions, Q5.5.4.5.</p> <p>Since Deadline 13 the Applicant, the MMO and NE have had further discussions with regard to the new cable protection decommissioning condition and an update on these discussions is provided in the Applicant's response to the fifth round of written questions Q5.8.3.2 [ExA.WQ-5.D13.V1].</p>
<p>The MMO provides a response to the ExA's Rule 17 Letter.</p>	<p>The Applicant notes the MMO's responses to the Rule 17 letter and is broadly in agreement with the answers provided. Again, the only area of disagreement is the Applicant's intention to include the HHW SIP and Grampian condition as an option for the SoS to use in the final dDCO, when the MMO would prefer that this option is removed.</p> <p>The Applicant welcomes the MMO's confirmation that there is sufficient detail provided within the CSIMP. The Applicant is in agreement that the decision on AEoI can and should be made by the SoS pre consent. Further detail is provided on page 95 section 2.9 of the SoCG with the MMO [REP9-023].</p> <p>The Applicant notes the MMO's (and Natural England's REP13-038) support for a SIP in the case of the Southern North Sea SAC and that has always been the Applicant's understanding of the matter (see section 2.6, page 51 of the SoCG with the MMO [REP9-023]).</p> <p>The Applicant appreciates the update by the MMO with regards to the Regulators Group regarding management of underwater noise risk and has no further comment to make at this stage.</p>

1.6 REP13-037, National Farmers Union

Summary of Submission	Applicant's Comments
<p>NFU would like confirmation that Vattenfall will agree to a joint OFTO managing agent in writing prior to the determination of the scheme.</p>	<p>The Applicant responded to this point in the response to Open Floor Hearing 3 (REP13-015) in particular reference section 17:</p> <p>The Applicant continues to engage with the NFU/LIG with respect to considering a managing agent as a point of singular contact for landowners during operation.</p>

Summary of Submission	Applicant's Comments
	<p>The concept of a single point of contact for landowners during operation has been agreed, however the final wording is still being negotiated.</p>
<p>Further the NFU would like to see much more detail in regard to landscape mitigation design and how this will be achieved through bunding and tree planting. As requested by others at the hearing it is believed that Vattenfall should have to provide a detailed landscape mitigation plan now and for this to be approved as part of the DCO. It is too late to leave the landscape mitigation plan to be decided within the Design Guide.</p>	<p>The Applicant responded to the points raised by the LIG/NFU in Open Floor Hearing 3, through the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular at section 17 and section 18.</p> <p>As an outcome of the Landscape and Visual Impacts Assessment undertaken and presented in the ES APP-242), a scheme of landscaping is proposed which is sufficient to mitigate the effects of the onshore project substation and National Grid substation extension, these are illustrated on ES Figure 29.9 to 29.22 [APP-492 to APP-508]. Details of the proposed landscape mitigation are secured in the Outline Landscape and Ecological Management Strategy (OLEMS) and will be further developed and confirmed once the detailed design of the infrastructure is known and will be subject to a design review through the Design Guide. Requirement 17 of the dDCO the secures the details which must be include in the final landscape management scheme which is to be approved by Breckland Council.</p> <p>An updated OLEMS (Version 6) has been submitted at Deadline 14 which confirms that further consideration will be given to the use of bunding and level changes as part of the overall detailed design (paragraph 71) and further commitments on the size of the tress which are used in the planting (paragraph 67).</p>
<p>Vattenfall have stated that the most thermally efficient crossing design and the least disruptive construction method are key to Norfolk Boreas and Vanguard. This needs to be agreed and confirmed by Hornsea 3, Orsted. The NFU are now concerned that Vattenfall have now had their DCO granted for the Norfolk Vanguard project, which is ahead of the DCO decision for Hornsea 3. The NFU would like confirmation that the position statement previously agreed with Vattenfall will still stand now that the Norfolk Vanguard scheme has been granted ahead of Hornsea 3.</p>	<p>The Applicant confirms that the position as agreed through the final Statement of Common Ground with the NFU (REP10-037) still stands;</p> <p><i>the project with the least number of cables/circuits (rather than the lesser width) will carry out the installation method by trenchless crossing and be below the other project. Therefore, the project with the most cables/circuits will use an open cut trench method and be located above the other project.</i></p> <p><i>However, if there is a good technical reason, such as being beneficial for overall thermal efficiency, it may be that the project with the least cables/circuits would be more appropriately located above the other project. In the case where only one project goes ahead (i.e. being Hornsea Project Three or Norfolk Vanguard and/or Norfolk Boreas, the project to be constructed, will be installed using open cut methods within the subsurface.</i></p> <p>The position was further clarified in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 17.</p>

Summary of Submission	Applicant's Comments
<p>The NFU would like to reiterate that it is essential that in the event a private water supply is affected by the scheme such as contamination, Vattenfall needs to provide an alternative water supply. Vattenfall have tried to insert the words 'reasonable endeavours' into the wording for private water supplies, which is not considered acceptable as it is not a strong enough commitment given the importance of a provision of a water supply.</p>	<p>The Applicant's position in relation to private water supplies remains as set out in the final Statement of Common Ground with the NFU (REP10-037) and as set out in version 5 of the Outline Code of Construction Practice (REP10-013).</p> <p>The position was further clarified in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 17. It was clarified in this response that the Applicant is not against the principle of the provision of an alternative water supply, however seeks to maintain a necessary measure of control and reasonableness.</p>
<p>Authority to Survey: The NFU really feels it is not unreasonable for Vattenfall or their contractors to be able to provide details on the surveys to be carried out, the equipment to be used and an indication of the timescales involved to carry out the survey.</p> <p>The NFU have provided details of two schemes, the A303 Stonehenge and the A30. This has been addressed differently in these applications, one by including the wording in the article and the other under the role of the ALO.</p> <p>The NFU would be happy for the wording to be set out in the same way within Article 16 of the draft DCO and as part of the role of the ALO which will be in the OCoCP.</p>	<p>The Applicant's position in relation to Article 16 and the Authority to Survey remains as set out in the final Statement of Common Ground with the NFU (REP10-037). The Applicant's position was set out clearly in the Applicant's Comments on Responses to the Examining Authority's Fourth Round of Written Questions (REP11-007) which was as follows:</p> <p>The Applicant refers to the response provided in the third round of written questions, (Q3.5.1.2) [REP10-034]. The Applicant notes the information provided by the NFU, however, the Applicant considers the previous response provided explains its position, as follows (and there is no change from the Applicant's position now in light of the NFU's latest comments): 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.</p> <p>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.</p>

Summary of Submission	Applicant's Comments
	<p>The position was further clarified in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 17.</p> <p>Notwithstanding the Applicant's position as outlined in REP13-015, the Applicant considers that Appendix B of the OCoCP, which contains the role of the Agricultural Liaison Officer (ALO), could be amended to include further details in relation to the provision of preconstruction survey information. Accordingly, the following wording has been included in the updated OCoCP Appendix B (Version 6), submitted at Deadline 14.</p> <p>The ALO will have responsibility for liaising with landowners, agents and occupiers in respect of the following:</p> <p>...</p> <ul style="list-style-type: none"> • "Where possible, providing preconstruction survey information to landowners (such as company name, survey type and equipment to be used, and an estimate of how long the surveys are expected to take) prior to the preconstruction survey commencing." <p>This text follows the wording that the NFU requested from the Highways England A303 scheme, as referred to in their response to the fourth round of written questions (Q.4.5.1.1) [REP10-062], and on that basis the Applicant assumes that this will be acceptable to the NFU.</p>
<p>Temporary Use of Land: The NFU are requesting that all DCOs should give 28 days' notice rather than the 14 days stated in the DCO. This is due to problems in planning or changing arrangements, notifying third parties or the farmer being on holiday. 28 days also allows a more appropriate amount of time to amend supply deliveries such as sprays/fertilisers, moving livestock to alternative locations and adapting business operations.</p> <p>The period of 28 days' notice has now been agreed on two DCO applications by Highways England for the A30 Chiverton to Carland Cross and A303 Stonehenge Scheme. HS2 have agreed to a 3 month notice period for temporary possession. Therefore, the NFU would like the notice period at paragraph (2) of Article 26 changed to 28 days.</p>	<p>The Applicant's position in relation to Article 26 and the notice period for temporary use of land remains as set out in the final Statement of Common Ground with the NFU (REP10-037).</p> <p>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.</p> <p>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'</p>

Summary of Submission	Applicant's Comments
<p>As stated at the hearing it makes no difference that there are no residential properties on the land in question as it is the impact of taking the land that will have the greatest impact on the landowners and occupiers.</p>	<p>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.</p> <p>The position was further clarified in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular reference section 17.</p>
<p>The red line boundary of the land required for the Boreas substation prevents the Landowner affected by the substation to be able to gain access to other land within the Estate ownership. Provision needs to be made within the DCO for suitable access to be provided. Please see the attached plan indicating where the location of the access is required circled in green. This access needs to be a minimum width of 12 metres to allow for agricultural machinery to pass.</p>	<p>The Applicant submitted a plan at deadline 13 (REP13-020) showing the agreed 12m gap that will be left free of landscaping to allow passage of agricultural vehicles along the private access track. This position has been agreed with the landowner concerned and is now included within the updated Design and Access Statement (DAS) Version 5 submitted at Deadline 14</p> <p>The position was also further clarified in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 18.</p>

1.7 REP13-038, Natural England's Response to Rule 17

Summary of Submission	Applicant's Comments
<p>Natural England responded to the Rule 17 request. The general theme of the responses is that Natural England's position has not changed from that presented to the ExA on or prior to Deadline 11.</p>	<p>The Applicant notes Natural England's responses to the Rule 17 letter and considers that these responses are primarily a reiteration of Natural England's existing positions which the Applicant considers have now either been addressed as far as possible within existing submissions or will be addressed within the Applicant's responses to the fifth round of written questions [ExA.WQ-5.D13.V1]. The Applicant does not consider that any new points are raised by Natural England within REP13-038 and therefore does not consider that a detailed line by line response is necessary as that would largely repeat previous submissions.</p> <p>The Applicant notes that Natural England's position on precaution in the ornithological assessment remains as stated previously, and this is also the case for the Applicant (see comments in REP13-013, REP4-014, REP6-021 and REP10-033).</p> <p>With respect to the cumulative impacts of the assessment on which Natural England were asked to provide responses in the Rule 17 request (R17.1.3 to R17.1.5) and in-combination effects on Special</p>

Summary of Submission	Applicant's Comments
	<p>Protection Areas (R17.1.6 to R17.1.10), Natural England's positions have remained unchanged (at the time of submission) and therefore no further comment is considered necessary from the Applicant. However, the Applicant welcomes the indication from Natural England that their conclusions on cumulative collisions for herring gull and lesser black-backed gull are likely to be updated to not significant (see REP13-038, response to question R17.1.4).</p> <p>Natural England has not updated its position on compensatory measures, and therefore the Applicant considers this confirms that Natural England's position remains that the proposed compensatory measures provide appropriate compensation options (as provided in REP9-046 and REP9-047). Natural England confirmed during a meeting with the Applicant on the 10th July that they consider the proposals contain a sufficient level of detail to demonstrate that they can suitably compensate for any AEoI and they are in agreement that any further detail would be agreed post consent in the final plans.</p> <p>The Applicant notes that on the topic of Haisborough Hammond and Winterton SAC, Natural England reiterate their primary concern that due to the potential requirement to place cable protection and uncertainties regarding recovery of habitats following its removal they are unable to advise that AEoI can be ruled out. The Applicant has always maintained that due to the small scale nature of the effect and the fact that research from other industries indicates that the affected habitats will recover, AEoI can be ruled out.</p> <p>The Applicant welcomes Natural England's agreement that all points raised by Natural England on the IPMP have been adopted and that they have no further comment.</p> <p>The Applicant also notes Natural England's confirmation that, on the topic of noise impacts for marine mammals they support the use of a SIP for the Southern North Sea SAC.</p>

1.8 REP13-039, NSAG (Offshore transmission connections review)

Summary of Submission	Applicant's Comments
<p>NSAG refer to the publication on the 15th July 2020 by BEIS of the scope of a review into the existing offshore transmission regime announced by the Energy Minister Kwasi Kwateng. They ask whether NV and NB will take advantage of the</p>	<p>The review referred to by NSAG was launched by Minister Kwasi Kwateng at a round-table meeting of MPs and other interested stakeholders involved in the timing, siting, design and delivery of offshore wind, including Vattenfall's UK Country Manager. The Applicant can confirm, that our parent company is indeed involved in and committed to the review. As noted previously (AS-024, REP5-045, REP7-017) the subject of both the medium and longer term workstreams are of direct interest to Vattenfall, as the</p>

Summary of Submission	Applicant's Comments
<p>review, particularly in relation to the medium term workstream.</p>	<p>topics under consideration encompass all aspects of the existing transmission network and regulatory regime and how this influences the design and delivery of transmission infrastructure.</p> <p>The Project and Norfolk Vanguard represent pathfinder projects, and promote considerable innovation in our proposals and designs which are pertinent to the review. Namely, the coordinated approach – delivering two projects via a shared transmission system. Further to this, the projects are pioneering HVDC transmission technology in the UK, which could be fundamental to any future coordinated transmission model. Shared infrastructure is likely to involve longer cable routes, where HVDC technology has clear efficiency benefits compared to HVAC technology. Furthermore, coordinated transmission systems will require offshore electrical platforms, including converter platforms to ensure energy from multiple projects can be coalesced. Finally, the technology being developed for Norfolk Boreas and Norfolk Vanguard in collaboration with the supply chain, includes higher voltage cabling, which currently is a major barrier to coordinated energy transmission.</p>

1.9 REP13-040, NSAG (Connection point)

Summary of Submission	Applicant's Comments
<p>NSAG submitted comments on the National Grid connection point process.</p>	<p>We have no comments on NSAG's comments on the National Grid connection point process.</p>

1.10 REP13-041, NSAG (Survey article)

Summary of Submission	Applicant's Comments
<p>NSAG have read in publications aimed at the offshore energy sector and its supply chain about the launch of an advanced offshore geophysical and geotechnical campaign. NSAG ask why such studies are appropriate.</p>	<p>As noted in these articles, the very specialist studies are to optimise wind turbine foundation engineering design, to ensure foundations chosen are suited to ground conditions within the array and to assist in the micro-siting of offshore cables, again within the existing red-line-boundary and parameters described within our consented application, in the case of Norfolk Vanguard, and proposed design-envelope in the case of the Project.</p> <p>The advanced survey work (being undertaken onshore, as well as offshore) ensures environmental impacts are further minimised, and advanced engineering design is bespoke to hyper-local conditions.</p>

1.11 REP13-042, NSAG (Rochdale Envelope)

Summary of Submission	Applicant's Comments
<p>REP13-041 queries the appropriateness of the use of the Rochdale Envelope and raises concerns that the visualisations do not represent a worst case.</p>	<p>The use of the 'Rochdale Envelope' is an approach supported by The Planning Inspectorate in their Advice Note Nine (The Planning Inspectorate, 2018). The Rochdale Envelope presents the maximum parameters of the project based on the worst-case assumption. This ensures the DCO application covers the maximum possible extent of the project.</p> <p>The Rochdale Envelope is the 'box' around the outer limits of the proposed project. While, at this application stage of the project, the detailed design is not fixed, it has been considered important to include an indicative model of the onshore project substation and National Grid substation extension, in order to enable a better understanding of the potential landscape and visual effects that could potentially arise. This approach was taken to avoid presenting a 'vague indication' of what the proposed project would look like.</p> <p>The converter halls are located within the site boundary and within the defined footprint for the onshore project substation. The iterative design process has led to a commitment to locate the converter halls towards the northern part of the site, partly to mitigate against the potential visual effects on residents in the Ivy Todd area, to the south of the site. The visualisations, therefore, do not underestimate the potential effects, but instead reflect the proposed zoning of the site, in which the converter halls would be located towards the north, thus increasing the separation distance from Ivy Todd.</p> <p>The visualisations do show the maximum effect – the blue dotted line has been set at 25m to include the lightning protection masts, which although not readily visible in more distant views, do extend 6m above the maximum building height of 19m. While it is possible to establish and commit to a set of maximum parameters, which the proposed project will not exceed, it is not possible or appropriate to set minimum parameters as there is not the same degree of certainty in terms of the extent to which technology will reduce the spatial requirements for electrical infrastructure prior to the delivery of this project.</p> <p>Regardless of whether HVDC or HVAC technology was to be used, it would still not be possible to establish a fixed design at the application stage of the project and, therefore, a Rochdale Envelope would still be deployed as the most appropriate means of covering a worst-case-scenario.</p>

1.12 REP13-043, NSAG (Health receptors)

Summary of Submission	Applicant's Comments
What is the purpose of judging the host population's sensitivities	<p>Determining the significance of an impact has two prerequisite stages; firstly assessing the sensitivity of the receptor, and secondly using professional judgement to assess whether the change to that receptor would result in a significant effect on, or to, that receptor.</p> <p>As such, judging a host population's sensitivities is a key part in conducting an EIA, as stated in section 27.3.4 ES Chapter 27 Human Health [APP-240].</p>
Use of best solutions regarding siting and mitigation	<p>The selection of Necton as the grid connection point for Norfolk Boreas was influenced by multiple factors (including National Grid's Guidelines on Substation Siting and Design – 'The Horlock Rules'), as detailed in ES Chapter 4 Site Selection and Assessment of Alternatives [APP-217]. The Environmental Impact Assessment presented in the Application [APP-214 to APP-247] describes the potential environmental impacts associated with Norfolk Boreas including those on human receptors [APP-240] and has identified appropriate mitigation where required.</p>
Relevance of indicators of population sensitivity in regards to projects such as Norfolk Boreas	<p>The Marmot Review identifies the <i>"critical importance of addressing the social determinants of health and of reducing inequalities in terms of exposures to hazards and the reduction of inequities in the distribution of the adverse consequences of those exposures"</i> e.g. the impact of deprivation, (Cave <i>et al.</i>, 2017).</p> <p>The indicators listed provide necessary data on the levels of deprivation in a given area.</p> <p>This provides information on inequalities facing individuals who form the population (receptor) and allows professionals to assess how impacts may disproportionately negatively affect these individuals compared to those who do not face the same inequalities. To prevent a further equality divide, populations facing deprivation should not be further subject to challenges over spatially similar populations who do not face the same deprivation.</p> <p>The indicators are key in assessing the resilience of a population and are therefore an essential part of conducting a professional and proportional EIA, as described by Cave <i>et al.</i> (2017).</p>

1.13 REP13-044, NSAG (HVDC transmission)

Summary of Submission	Applicant's Comments
NSAG raise questions in relation to the landscaping mitigation strategy for a HVDC substation and question the approach to be taken on consideration of cumulative landscape and visual impacts.	<p>Landscape impacts and proposed mitigation for the onshore above ground infrastructure were addressed in the Applicant's Response to the Open Floor Hearing 3 [REP13-015].</p> <p>The cumulative landscape and visual impacts of Norfolk Boreas and Norfolk Vanguard are fully addressed in Chapter 29 of the Environmental Statement and are, properly, under consideration in the Norfolk Boreas Examination (rather than the Norfolk Vanguard Examination) where they can be addressed in the context of the full details of the Norfolk Boreas proposals detailed in the DCO application.</p>

1.14 REP13-045, NSAG (Cumulative Effects)

Summary of Submission	Applicant's Comments
NSAG comment on the approach to be taken on consideration of cumulative landscape and visual impacts and the principle of consistency in decision making.	As set out in response to [REP13-044] the cumulative landscape and visual impacts of Norfolk Boreas and Norfolk Vanguard are fully addressed in Chapter 29 of the Environmental Statement and are, properly, under consideration in the Norfolk Boreas Examination (rather than the Norfolk Vanguard Examination) where they can be addressed in the context of the full details of the Norfolk Boreas proposals detailed in the DCO application.

1.15 REP13-046, NSAG (Red Kites)

Summary of Submission	Applicant's Comments
REP13-046 provides information on the recent presence of Red Kites in the vicinity of Necton, asks how they have been considered in the bird surveys and if the Applicant is aware of their protection under Schedule 1.	<p>The Applicant is aware of the conservation status of red kites <i>Milvus milvus</i> within the UK, and has considered the potential impact during the breeding season on these and all bird species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) within Chapter 23 Onshore Ornithology of the Environmental Statement (APP-236) (see, for example, Section 23.2.1.3).</p> <p>The Extended Phase 1 Habitat Surveys undertaken to inform the Norfolk Boreas EIA included a search for suitable habitat to support all breeding birds, including those listed under Schedule 1 (see APP-592, p.16 Section 4.3.1.1 and p.137 Section 22.4.3.1.1). In addition, the breeding bird surveys (APP-614)</p>

Summary of Submission	Applicant's Comments
	<p>undertaken to inform the Norfolk Boreas EIA, which focussed on selected areas of higher risk of supporting notable breeding birds, recorded those Schedule 1 birds breeding within the survey area.</p> <p>No red kites were recorded during the Extended Phase 1 Habitat Surveys nor breeding bird surveys undertaken to inform the Norfolk Boreas EIA.</p> <p>As noted within the Outline Landscape and Ecological Management Strategy (OLEMS) (REP10-014), all unsurveyed areas will be subject to Extended Phase 1 Habitat Surveys prior to construction. If red kites are now found to be actively nesting within the survey area following these surveys, mitigation measures will be included within the project's Ecological Management Plan (EMP) (under Requirement 24 of the Draft DCO (REP13-007)), which will be consulted on with Natural England prior to approval by the relevant local planning authority. This mitigation would likely include the use of appropriate disturbance buffers around any active nest of a Schedule 1 bird, with working restrictions within these buffers for the duration of the period that the nests remain active, and monitoring of any active nest during construction works by the project's ECoW. The detail of this mitigation would be agreed with Natural England and included within EMP prior to construction.</p> <p>It should be noted that current available evidence regarding potential disturbance distances for breeding red kite indicates that disturbance is unlikely to occur beyond 300m from anthropogenic activity, and is potentially unlikely at smaller distances (down to 10m) in areas where there is regular natural anthropogenic disturbance e.g. agriculture, footpaths, roads and housing etc. (Ruddock and Whitfield, 2007), as is found in the area surrounding Necton.</p>

1.16 REP13-047, NSAG (Land take)

Summary of Submission	Applicant's Comments
<p>How many acres are permanently and temporarily lost?</p>	<p>In relation to the land requirements, permanent acquisition of land (pink land on the Land Plans [REP9-003 – REP9-008]) occurs at the western end of the project to enable the construction of the national grid substation extension, the provision of landscaping requirements, access road and the construction of Vattenfall's converter stations. The 45m wide cable corridor (yellow land on the Land Plans) will be occupied temporarily during construction, although post construction permanent easements will remain along the length of the cable corridor. All the land within the 45m corridor will be returned to farming uses post construction. For scenario 1, the total temporarily occupied land is reduced as the majority of mobilisation areas and HDD zones (blue land on the Land Plans) along the cable corridor will have been</p>

Summary of Submission	Applicant's Comments
	<p>utilised by Norfolk Vanguard for duct installation and are therefore not required by Norfolk Boreas. For scenario two, Norfolk Boreas requires the use of all mobilisation areas and HDD zones in order to install the ducts along the cable route. The total areas of land affected on a temporary and permanent basis are as below:</p> <p>Temporary</p> <ul style="list-style-type: none"> • Scenario 1 total land (excluding seabed) = 912 acres • Scenario 2 total land (excluding seabed) = 1244.60 acres <p>Permanent</p> <ul style="list-style-type: none"> • Scenario 1 permanent land take = 41.84 acres • Scenario 2 permanent land take = 68.75 acres

1.17 REP13-048, Network Rail

Summary of Submission	Applicant's Comments
<p>On 23 July 2020, Addleshaw Goddard, on behalf of Network Rail, confirmed that necessary commercial arrangements between the Applicant and Network Rail had concluded and accordingly Network Rail was withdrawing its representations on the Project.</p>	<p>The Applicant welcomes Network Rail's confirmation that their objection to the Project is withdrawn following the conclusion of relevant commercial arrangements between the parties.</p>

1.18 REP13-049, RSPB's Response to Rule 17

Summary of Submission	Applicant's Comments
<p>The RSPB responded to the Rule 17 request. The general theme of the responses is that the RSPB's position has not changed from that presented to the ExA on or prior to Deadline 11.</p>	<p>The Applicant notes the RSPB's responses to the Rule 17 letter and considers that these responses are primarily a reiteration of their existing positions (and this is also stated by the RSPB in REP13-049). The Applicant does not consider that any new points are raised by the RSPB responses within REP13-049 and therefore does not consider that a detailed line by line response is necessary since this would largely repeat the Applicant's previous submission in REP13-013.</p>

1.19 REP13-050, Chris Allhusen

Summary of Submission	Applicant's Comments
<p>Siting. Both Norfolk Vanguard and Norfolk Boreas projects are being proposed on top of one of Norfolk's highest hills. The Top Farm site would be a far better site for both projects as it is adjacent to the National Grid substation as well as being 20 metres lower. I do not believe that the original site selection for either project was properly carried out, the site options were the easiest for the applicant, not the best for Norfolk.</p>	<p>The Applicant set out its position in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to sections 13, 14 and 18.</p>
<p>Sub-station land purchase. We have had no communication regarding the sub-station site since our meeting with Norfolk Boreas on the 16th March this year, other than an acknowledgement of the meeting, some photographs of considerably smaller sub-stations and some discussions regarding tree screening species. We are still waiting for answers to all other questions raised at that meeting, most of which I have elaborated upon below.</p>	<p>The Applicant is continuing to engage with the landowner and a conference call was held on the 10th August 2020 with the landowner's agent, where proactive discussions and negotiations continued. A further face to face meeting is arranged for the end of August.</p> <p>Further information was also submitted in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 18.</p>
<p>Design & Access statement. Whilst we have received rather woolly assurances about being involved in the visual aspects of the building's design and the tree screening, to minimise its visual effect, nothing concrete has come out so far. I understand that the final design of these huge buildings, sited on one of the highest hills in Norfolk, has yet to be decided, which is far from satisfactory. As previous speakers at the meeting said, I would like to see far more detail on this matter produced and Norfolk Boreas forced to adhere to it, before this hearing is concluded.</p>	<p>The Applicant responded to the points raised in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 18.</p>
<p>Bundling. The buildings could be part hidden by the use of bunding, especially on the eastern and southern sides where the land is highest, and where the buildings could be partially</p>	<p>The Applicant responded to the points raised in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 18.</p>

Summary of Submission	Applicant's Comments
<p>dug into the ground, but we are concerned that efforts to minimise local visual impact will be ignored by Norfolk Boreas as far as possible.</p>	
<p>Tree screening. No trees will hide these huge buildings, and few of the trees proposed will even reach the building eaves height during the life of this project. Early planting of larger specimens and bunding could help alleviate this but so far neither project is being held to this. We have had some good discussions with Jo Phillips who is advising Norfolk Boreas, but these are only discussions and I would like to see Norfolk Boreas commit in writing to the use of early planting and good size plants.</p>	<p>The Applicant responded to the points raised in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 18. In addition, a further commitment has been made by the Applicant and secured within the OLEMS (Version 6) submitted at Deadline 14 with respect to both early planting and larger size trees.</p>
<p>Noise. There have been no noise surveys carried out on our Estate at all, despite frequent requests to establish a base line. I understand that Norfolk Boreas do not consider this necessary. No information has been forthcoming regarding the noise that might emanate from external electrical structures and buildings. We are concerned that although careful design of such buildings could reduce the noise from them to almost zero, Norfolk Boreas may feel that the cost involved might outweigh the benefit to the local environment and ignore our concerns.</p>	<p>The Applicant responded to the points raised in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 18.</p>
<p>Light pollution. We are waiting for assurances that light pollution will be kept to a minimum both during construction and operation. Our concern is based on the fact that this was not the case with Dudgeon.</p>	<p>The Applicant responded to the points raised in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 18.</p>
<p>Land-locking. We requested a change to the south east corner of the site that Norfolk Boreas require in order that we are not land-locked between two fields, and can travel between them, but we have so far heard nothing definitive so far. I attach a plan showing this corner where we would ask for a 12 meter corridor (see black line indicating new boundary) to enable us to get machinery between the two</p>	<p>The Applicant submitted a plan at deadline 13 (REP13-020) showing the agreed 12m gap that will be left free of landscaping to allow passage of agricultural vehicles along the private access track. This position was discussed on the conference call on the 10th August, has been agreed with the landowner concerned, and this plan is now included in the updated DAS (Version 5). to be submitted at Deadline 14.</p>

Summary of Submission	Applicant's Comments
<p>fields. I have hatched in green the existing mature woodland adjacent to this corner, which is why we cannot use that area for access.</p>	<p>The position was further clarified in the Applicant's response to Open Floor Hearing 3 (REP13-015) in particular with reference to section 18.</p>
<p>Compulsory Purchase Powers. I am increasingly concerned that both Norfolk Vanguard and Norfolk Boreas intend to rely heavily on the use of compulsory purchase powers to avoid the need to conclude effective negotiations with Landowners. Vattenfall is a Swedish company and the impression that we get from negotiations to date and lack of concrete information provided by Vattenfall, are that they have little concern for the feelings of and effects on the immediate local population.</p>	<p>As set out above, the Applicant is continuing to engage with the landowner and the most recent conference call was held on the 10th August 2020 where proactive discussions and negotiations continued. A further face to face meeting is arranged for the end of August.</p> <p>The Applicant remains committed to acquire the required land through private agreement where possible, offers have been made and the Applicant will continue to negotiate with the landowner in this regard.</p>

1.20 REP13-051, Polly Brockis

The Applicant refers to the Applicant's response to the ExA's fifth written questions [ExA.WQ-5.D14.V1] Q5.14.1.1 where it has provided details on the discussions held with this Interested Party following OFH3. Further details are included in the Technical Note Access and Egress onto the B1145 [ExA.AS-5.D14.V1].

1.21 REP13-052 Colin King

Summary of Submission	Applicant's Comments
<p>REP13-052 provides comments on the Applicant's comments on Deadline 10 submissions with respect to the accuracy of the visualisations and refers to the use of the Rochdale Envelope.</p>	<p>The Applicant refers to the comments on REP13-042 in Section 1.11 above, which clarifies that the blue dotted line on the visualisation has been set at 25m to include the lightning protection masts. However, the maximum dimensions of the convertor halls; 19m height and total footprint of each convertor hall of 11m by 70m (as secured through Requirement 16 of the dDCO) are reflected in the visualisation to show the maximum effect.</p>

Summary of Submission	Applicant's Comments
Queries are raised regarding the operational noise limits, the receptor sensitivity and background noise levels.	The Applicant refers to the comments on REP13-053 in Section 1.19 where it has provided a response regarding the matters raised on operational noise.
Reference is made to the use of bunding and references to discussions with Breckland Council.	As detailed in the OLEMS [REP10-014] paragraph 70 and discussed with Breckland Council during the development of the landscape management scheme the use of bunding will be given further consideration as part of the overall detailed design. Furthermore, the OLEMS has been updated (Version 6) submitted at Deadline 14 to also include consideration of level changes. To clarify, bunding was not shown on the visualisation in order to represent a worst case.
REPP 13-052 also references the need for a new method of connecting offshore wind generation to the grid, the HVAC/HVDC transmission system and the connection point at Necton.	The Applicant refers the Applicant's Response to Open Floor Hearing 2 [REP13-014] and the Applicant's Response to Open Floor Hearing 3 [REP13-015] where it has provided a response to these matters.

1.22 REP13-053, Colin King (Late submission)

Summary of Submission	Applicant's Comments
REP13-053 raises queries regarding the operational noise limits, consideration of baseline noise levels and sensitivity of receptors.	<p>A detailed in the Applicant's response to OFH3 [REP3-105] the operational noise limits were conditions set by Breckland Council and have been derived and assessed in accordance with British Standard 4142. These limits are considered appropriate to ensure the soundscape at the identified and agreed receptors does not change beyond the existing Dudgeon condition noise levels from the operation of the Norfolk Boreas and / or Norfolk Vanguard onshore project substation.</p> <p>The Applicant refers to ES Chapter 25 [APP-238] Section 25.4.1.3 which provides full details of the methodology used to undertake the operational phase assessment in accordance with BS 4142, which includes guidance on the method of determining the level of noise for an industrial noise source and the existing background noise levels. The assessment was informed by the baseline noise survey undertaken (APP-657) and considered the existing baseline noise conditions.</p> <p>As detailed in Section 25.4.14 of ES Chapter 25 [APP-238] the sensitivity of the noise receptors is based on the receptors' tolerance to potential effects not their existing location. The noise sensitivity of receptors identified in the vicinity of the onshore project substation (closest human receptors) are all residential receptors, which are considered to be of medium sensitivity. The receptor locations and designated sensitivity has been agreed with Breckland Council.</p>

2 References

- | |
|---|
| <p>Cave, B., F, J., Pyper, R., Gibson, G. & Saunders, P. (2017) Health in Environmental Impact Assessment: a primer for a proportionate approach. Lincoln, England.
https://www.researchgate.net/profile/Ben_Cave3/publication/316968065_Health_in_Environmental_Impact_Assessment_a_primer_for_a_proportionate_approach/links/591aced6aca2722d7cffb2b0/Health-in-Environmental-Impact-Assessment-a-primer-for-a-proportionate-approach.pdf</p> |
| <p>Marmot M, et al. Fair society, healthy lives. (2010) http://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report-pdf.pdf</p> |
| <p>Ruddock, M. & Whitfield, D.P. (2007) A Review of Disturbance Distances in Selected Bird Species. Natural Research (Projects) Ltd.</p> |