



**Norfolk Vanguard Offshore Wind Farm** 

# Schedule of Responses to Relevant Representations







Date	Issue No.	Remarks / Reason for Issue	Author	Checked	Approved
01/11/2018	00	First draft for Internal review	CC/ST	GK/JA	JA
02/11/2018	01D	First draft for Norfolk Vanguard Limited review	CC/ST	JA	JA
15/11/18	02D	Second draft	GK	JA	JA
26/11/18	03D	Third draft	GK	JA	JA
18/12/18	04D	Fourth draft	GK	JA	JA
07/01/19	05D	Fifth draft	GK	JA	JA
10/01/19	06D	Sixth draft	GK	JA	JA
10/01/19	07D	Seventh draft	МТ	EVD	EVD
11/01/19	08D	Final	GK	JA	JA





# **Table of Contents**

1	Comments on Relevant Representations	1
1.1	Policy and Legislation	2
1.2	Site Selection	4
1.3	Project Description and Order Limits	11
1.4	Marine Geology, Oceanography and Physical Processes	13
1.5	Marine Water and Sediment Quality	18
1.6	Benthic and Intertidal Ecology	18
1.7	Fish and Shellfish Ecology	20
1.8	Marine Mammals	22
1.9	Offshore Ornithology	25
1.10	Commercial Fisheries	28
1.11	Shipping and Navigation	29
1.12	Offshore Archaeology	31
1.13	Infrastructure and Other Users	31
1.14	Ground Conditions and Contamination	32
1.15	Water Resources and Flood Risk	33
1.16	Land Use	38
1.17	Onshore Ecology	42
1.18	Onshore Ornithology	46
1.19	Traffic and Transport	47
1.20	Noise	52
1.21	Air Quality	54
1.22	Human Health	55
1.23	Onshore Archaeology	56
1.24	Landscape and Visual	58
1.25	Socio-economics, Tourism & Recreation	62
1.26	DML and DCO	65
1.27	Renewable Energy	66
1.28	Consultation and Requests for Additional Information	66
1.29	Miscellaneous	69
Appendix 1	Relevant Representation Numbers	74





# **Acronyms**

AC	Alternating Current
ALC	Agricultural Land Classification
СоСР	Code of Construction Practice
DC	Direct Current
DCO	Development Consent Order
DML	Deemed Marine Licence
EEECR	East of England Energy Group
EIA	Environmental Impact Assessment
EMF	Electromagnetic Fields
EMP	Ecological Management Plan
ES	Environmental Statement
HDD	Horizontal Directional Drilling
HoTs	Heads of Terms
HRA	Habitats Regulations Assessment
HSE	Health and Safety Executive
HVDC	High Voltage Direct Current
IFCA	Inshore Fisheries and Conservation Agency
MMMP	Marine Mammal Mitigation Protocol
ММО	Marine Management Organisation
MSA	Mineral Safeguard Areas
NALEP	New Anglia Local Enterprise Partnership
NE	Natural England
NFU	National Farmers' Union
NNDC	North Norfolk District Council
OLEMS	Outline Landscape and Ecological Management Plan
PBR	Potential Biological Removal
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SIP	Site Integrity Plan
SMP	Shoreline Management Plan





SPA	Special Protection Area
SoCG	Statement of Common Ground
SuDS	Sustainable Urban Drainage Systems
UXO	Unexploded Ordnance
WSI	Written Scheme of Investigation





#### 1 COMMENTS ON RELEVANT REPRESENTATIONS

- 1. A total of 267 Relevant Representations were received by the Planning Inspectorate in respect to Norfolk Vanguard (hereby 'the project') during the statutory consultation period under section 56 of the Planning Act 2008.
- 2. The 267 Relevant Representations comprised the following:
  - 3 from local authorities;
  - 232 from members of the public;
  - 10 from non-statutory organisations;
  - 14 from statutory consultees; and
  - 8 from parish councils.
- 3. In addition, five responses were received from consultees of Transboundary consultation. These have also been considered within this document.
- 4. Norfolk Vanguard Limited (the Applicant) has reviewed each of the Relevant Representations. A summary of the key topics raised by the relevant representations along with the Applicant's response is provided in each of the sections below. Each interested party that made a relevant representation has been allocated a respective number in Appendix 1 of this document.
- 5. In some cases, where Relevant Representations provide detailed comments (e.g. regarding specific values in the Development Consent Order (DCO) application), these are being considered further and will be addressed separately through Statements of Common Ground (SoCG) or through other document submissions during the Examination.





# 1.1 Policy and Legislation

Table 1 Applicant responses to Relevant Representations in relation to policy and legislation

Topic/ Issue	Relevant Representation Number	Applicant Response
	Marine Policy Statement and East Marine Pla  Marine Policy Statement  Norfolk Vanguard complies with the Overard Statement. The high level marine objectives  Achieving a sustainable marine ecol Ensuring a strong, healthy and just so Living within environmental limits; Promoting good governance; and Using sound science responsibly.  Norfolk Vanguard is an important contributors.	Environmental Statement (ES) Chapter 3 Policy and Legislative Context considers the Marine Policy Statement and East Marine Plans.
		Marine Policy Statement
Explanation of how Norfolk		Promoting good governance; and
Vanguard complies with Marine Policy Statement and the East Inshore and East Offshore Marine Plans		Norfolk Vanguard is an important contributor to society and the economy as presented in ES Chapter 2 Need for the Project. The socio-economic impacts of the project are assessed in ES Chapter 31 Socio-economics.
Walling Halls		The Environmental Impact Assessment (EIA) for the project ensures the project is developed within environmental limits, ensuring a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and heritage assets. Impacts on the marine environment are minimised through mitigation embedded in the project design as well as additional mitigation measures where appropriate, with impacts identified as being of minor significance or below.
		The DCO includes a number of mitigation and monitoring plans which provide a framework to ensure that good governance of the potential impacts continues throughout the life of the project and allow decisions to be based on the best available scientific understanding at the time.





Topic/ Issue	Relevant Representation Number	Applicant Response
		Objectives of the East Marine Plans  Norfolk Vanguard is supported by objectives 1 to 4 and 9 of the East Marine Plans in that the project is an important contributor to the economy, society, energy security and carbon reduction as presented in ES Chapter 2 and assessed in ES Chapter 31.  Objective 5 has been considered by the assessment of heritage assets and seascapes in ES Chapter 17 Offshore Archaeology and Cultural Heritage.  Objectives 6 to 8 are covered by the EIA, in that any impacts are identified and mitigated against, where appropriate, to ensure that any residual impacts are not significant.
Explanation of how Norfolk Vanguard complies with local planning policy (for example in Breckland) and National Policy Statements (NPS) (related to visual impact/disruption and how this is reconciled against local planning policy/NPS)	Rep 132, Rep 210, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 219, Rep 220, Rep 223, Rep 224, Rep 235, Rep 237, Rep 240, Rep 254, Rep 257	<ul> <li>Planning Statement (document 8.2)</li> <li>ES Chapter 3 Policy and Legislative Context</li> <li>Chapter 17 of the Consultation Report (document 5.1) – Overview of Non-Statutory Consultation and Influence on the Project</li> <li>Appendix 12.4 of the Consultation Report – October 2016 Newsletter</li> <li>Appendix 12.7 of the Consultation Report – Phase I Non-Statutory Public Exhibition Materials</li> </ul>





#### 1.2 Site Selection

Table 2 Applicant responses to Relevant Representations in relation to Site Selection

Topic/ Issue	Relevant Representation Number	Applicant Response
Alternative sites (Onshore Project Substation)	Rep 4, Rep 5, Rep 8, Rep 10, Rep 25, Rep 26, Rep 27, Rep 28, Rep 30, Rep 31, Rep 34, Rep 35, Rep 40, Rep 42, Rep 43, Rep 44, Rep 47, Rep 50, Rep 52, Rep 55, Rep 56, Rep 57, Rep 58, Rep 59, Rep 61Rep 4, Rep 5, Rep 8, Rep 10, Rep 25, Rep 26, Rep 27, Rep 28, Rep 30, Rep 31, Rep 34, Rep 35, Rep 40, Rep 42, Rep 43, Rep 44, Rep 47, Rep 50, Rep 52, Rep 55, Rep 56, Rep 57, Rep 58, Rep 59, Rep 61, Rep 64, Rep 70, Rep 74, Rep 76, Rep 84, Rep 87, Rep 88, Rep 91, Rep 92, Rep 95, Rep 100, Rep 104, Rep 105, Rep 107, Rep 111, Rep 115, Rep 120, Rep 122, Rep 125, Rep 126, Rep 128, Rep 133, Rep 134, Rep 143, Rep 144, Rep 145, Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 204, Rep 204, Rep 205, Rep 206, Rep 207, Rep 208, Rep 210, Rep 211, Rep 212, Rep 213, Rep 215, Rep 216, Rep 217, Rep 219, Rep 220, Rep 221, Rep 223, Rep 224, Rep 225, Rep 226, Rep 227, Rep 230, Rep 231, Rep 233, Rep 234, Rep 235, Rep 236, Rep 237, Rep 239, Rep 240, Rep 241, Rep 244, Rep 246, Rep 248, Rep 249, Rep 250, Rep 251, Rep 252, Rep 253, Rep 256, Rep 257, Rep 259, Rep 260, Rep 263, Rep 264, Rep 265, Rep 266, Rep 267	Issues raised regarding the suitability of the Necton location for the onshore project substation include: site selection, landscape and visual impacts, flood risk, contaminated land and operational noise. The issues raised have been considered within the following submission documents:  • ES (document 6.1) and DCO documents  • ES Chapter 4 Site Selection and Alternatives;  • Including application of the Horlock Rules;  • ES Chapter 29 Landscape and Visual Impacts.  • Mitigation measures are detailed within the Outline Landscape and Ecological Management Plan (OLEMS; document 8.7);  • ES Chapter 19 Ground Conditions and Contamination.  • Mitigation measures are detailed within the Outline CoCP  • ES Chapter 20 Water Resources and Flood Risk and Appendix 20.1 - Flood Risk Assessment.  • Mitigation measures are detailed within the Outline Code of Construction Practice (CoCP; document 8.1);  • ES Chapter 25 Noise and Vibration.  • Mitigation measures are detailed within the Outline CoCP  • Consultation Report (document 5.1)  • Chapter 3 of the Consultation.  • Chapter 3 of the Consultation Report – Introduction  • Chapter 14 of the Consultation Report – Phase IIb- Additional Non-Statutory Consultation -Workshops  • Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the project





Topic/ Issue	Relevant Representation Number	Applicant Response
		<ul> <li>Chapter 23 of the Consultation Report – Summary of Responses under Section 47 of the 2008 Act</li> <li>Appendix 3.1 of the Consultation Report – Hearing Your Views I (interim consultation report) and Hearing Your Views I Summary Report         https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/norfolk-vanguard-october-2016-drop-in-summary-report.pdf)     </li> <li>Appendix 3.2 of the Consultation Report – Hearing Your Views II (interim consultation report) and Hearing Your Views II Summary Report         https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/summary-report.pdf     </li> <li>Appendix 3.3 of the Consultation Report – Hearing Your Views III (interim consultation report)</li> <li>Appendix 4.2 of the Consultation Report – FAQ Documents</li> <li>Appendix 12.7 of the Consultation Report – Phase I Non- Statutory Public Exhibition Materials</li> <li>Appendix 12.8 of the Consultation Report – Phase II Non- Statutory Public Exhibition Materials</li> <li>Appendix 13.2 of the Consultation Report – March 2017 Newsletter Appendix 14.1 of the Consultation Report – June 2017 Newsletter</li> <li>Appendix 14.8 of the Consultation Report – Necton Substation Workshop Presentations</li> <li>Appendix 20.9 of the Consultation Report – Consultation Summary Document</li> </ul>
		<ul> <li>Appendix 20.10 of the Consultation Report – Formal Consultation Public Exhibition Boards</li> <li>In addition, a report on the Strategic Approach to Selecting a Grid Connection Point for Norfolk Vanguard and Norfolk Boreas (Document Pre-ExA; OCP Report; 9.2,</li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
		submitted to the Planning Inspectorate on 23 October 2018) provides a summary of the context and work carried out by National Grid and Vattenfall Wind Power Limited (parent company of the Applicant) to select an appropriate location to connect to the National Electricity Transmission System.  The suitability of the Necton location is also being discussed in SoCGs with the following stakeholders:  Norfolk County Council; Breckland Council; and Necton Parish Council.
Approach with National Grid to selecting a grid connection point at Necton	Rep 40, Rep 44, Rep 47, Rep 108, Rep 159, Rep 228, Rep 235, Rep 237, Rep 240, Rep 249, Rep 257, Rep 260, Rep 263, Rep 264	The report on the Strategic Approach to Selecting a Grid Connection Point for Norfolk Vanguard and Norfolk Boreas (Document Pre-ExA; OCP Report; 9.2, submitted to the Planning Inspectorate on 23 October 2018) provides a summary of the context and work carried out by National Grid and Vattenfall Wind Power Limited (parent company of the Applicant) to select an appropriate location to connect to the National Electricity Transmission System.
		<ul> <li>Further detail relating to the site selection process can be reviewed in the following submission documents:         <ul> <li>ES Chapter 4 Site Selection and Alternatives.</li> <li>Chapter 3 of the Consultation Report – Introduction</li> <li>Chapter 14 of the Consultation Report – Phase IIb- Additional Non-Statutory Consultation -Workshops</li> <li>Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the project</li> <li>Chapter 23 of the Consultation Report – Summary of Responses under Section 47 of the 2008 Act</li> <li>Appendix 3.1 of the Consultation Report – Hearing Your Views I (interim consultation report) and Hearing Your Views I Summary Report</li> </ul> </li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
		https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/norfolk-vanguard-october-2016-drop-in-summary-report.pdf)  • Appendix 3.2 of the Consultation Report – Hearing Your Views II (interim consultation report) and Hearing Your Views II Summary Report https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/summary-report.pdf  • Appendix 3.3 of the Consultation Report – Hearing Your Views III (interim consultation report)  • Appendix 4.2 of the Consultation Report – FAQ Documents  • Appendix 12.7 of the Consultation Report – Phase I Non- Statutory Public Exhibition Materials  • Appendix 12.8 of the Consultation Report – Phase II Non- Statutory Public Exhibition Materials  • Appendix 13.2 of the Consultation Report – March 2017 Newsletter  • Appendix 14.1 of the Consultation Report – June 2017 Newsletter  • Appendix 14.8 of the Consultation Report – Necton Substation Workshop Presentations  • Appendix 22.1 of the Consultation Report – Section 42 Responses, and regard had by the Applicant  • Appendix 20.9 of the Consultation Report – Consultation Summary Document (which was made available at the beginning of the statutory consultation)  • Appendix 20.10 of the Consultation Report – Formal Consultation Public Exhibition Boards
Alternative sites (Landfall location – e.g. Bacton/Walpole)	Rep 10, Rep 78, Rep 143, Rep 159, Rep 206, Rep 209, Rep 210, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 219, Rep 220, Rep 221, Rep 223, Rep 224, Rep 228, Rep 255	The offshore and onshore cable routes have been chosen to minimise environmental impacts associated with the project. The choice of location for landfall was a key part of this consideration and factors including the need to avoid designated sites offshore, such as the Marine Conservation Zone (MCZ), and onshore, such as The Broads National Park, influenced the decision-making process.





Topic/ Issue	Relevant Representation Number	Applicant Response
		The following submission documents respond to this issue:  ES Chapter 4 Site Selection and Alternatives. Chapter 3 of the Consultation Report – Introduction Chapter 12 of the Consultation Report – Phase I Non-Statutory Consultation Period (Scoping Consultation) Chapter 13 of the Consultation Report – Phase II Non-Statutory Consultation Period (Refining the Project) Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project Chapter 23 of the Consultation Report – Summary of Responses under Section 47 of the 2008 Act Appendix 3.1 of the Consultation Report – Hearing Your Views I (interim consultation report) and Hearing Your Views I Summary Report <a href="https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/norfolk-vanguard-october-2016-drop-in-summary-report.pdf">https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/norfolk-vanguard-october-2016-drop-in-summary-report.pdf</a> Appendix 3.2 of the Consultation Report – Hearing Your Views II (interim consultation report) and Hearing Your Views II Summary Report <a href="https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/summary-report.pdf">https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/summary-report.pdf</a> Appendix 3.3 of the Consultation Report – Hearing Your Views III (interim consultation report) Appendix 4.2 of the Consultation Report – Phase I Non- Statutory Public Exhibition Materials Appendix 12.7 of the Consultation Report – Phase II Non- Statutory Public Exhibition Materials Appendix 14.1 of the Consultation Report – Consultation Summary Document (which was made available at the beginning of the statutory consultation)





Topic/ Issue	Relevant Representation Number	Applicant Response
		<ul> <li>Appendix 20.10 of the Consultation Report – Formal Consultation Public Exhibition Boards</li> <li>Appendix 22.1 of the Consultation Report – Section 42 Responses, and regard had by the Applicant</li> <li>Hearing Your Views II Summary Report – Available on the Project Website, <a href="https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/summary-report.pdf">https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/summary-report.pdf</a></li> </ul>
Onshore Cable Route selection process	Rep 36, Rep 44, Rep 74, Rep 79, Rep 107, Rep 206, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 219, Rep 220, Rep 223, Rep 224	The report on the Strategic Approach to Selecting a Grid Connection Point for Norfolk Vanguard and Norfolk Boreas (Document Pre-ExA; OCP Report; 9.2, submitted to the Planning Inspectorate on 23 October 2018) provides a summary of the context and work carried out by National Grid and Vattenfall Wind Power Limited (parent company of the Applicant) to select an appropriate location to connect to the National Electricity Transmission System.
		The grid connection point decision undertaken with National Grid considered a range of alternative connection points. This included, for example, a new connection point to National Grid closer to the coast. However, to accommodate such a connection, National Grid would have to connect to an existing substation via overhead lines, due to the length of the 400kV AC connection that would be required. The decision was therefore taken to avoid overhead lines in order to minimise visual impacts and instead construct underground cables to an existing National Grid substation with the required capacity.
		The following submission documents respond to this issue:
		<ul> <li>ES Chapter 4 Site Selection and Alternatives.</li> <li>ES Chapter 5 Project Description.</li> <li>Chapter 3 of the Consultation Report – Introduction</li> <li>Chapter 12 of the Consultation Report – Phase I Non-Statutory Consultation Period (Scoping Consultation)</li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
		<ul> <li>Chapter 13 of the Consultation Report – Phase II Non-Statutory Consultation Period (Refining the Project)</li> <li>Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project</li> <li>Chapter 23 of the Consultation Report – Summary of Responses under Section 47 of the 2008 Act</li> <li>Appendix 3.1 of the Consultation Report – Hearing Your Views I (interim consultation report) Plus also see Hearing Your Views I Summary Report <a href="https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/norfolk-vanguard-october-2016-drop-in-summary-report.pdf">https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/norfolk-vanguard-october-2016-drop-in-summary-report.pdf</a></li> <li>Appendix 3.2 of the Consultation Report – Hearing Your Views II (interim consultation report). Plus Hearing Your Views II Summary Report <a href="https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/summary-report.pdf">https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/summary-report.pdf</a></li> <li>Appendix 3.3 of the Consultation Report – Hearing Your Views III (interim consultation report)</li> <li>Appendix 4.2 of the Consultation Report – FAQ Documents</li> <li>Appendix 12.7 of the Consultation Report – Phase I Non- Statutory Public Exhibition Materials</li> <li>Appendix 14.8 of the Consultation Report – Necton Substation Workshop Presentations</li> </ul>





# 1.3 Project Description and Order Limits

#### **Table 3 Applicant responses to Relevant Representations in relation to Project Description and Order Limits**

Topic/ Issue	Relevant Representation Number	Applicant Response
Defining the worst case scenario for the project	Rep 186	The worst case scenarios are based on the parameters which will have the greatest impact for each receptor/impact following the Rochdale Envelope approach in accordance with Advice Note Nine: Rochdale Envelope (the Planning Inspectorate, 2012) as described in Section 5.1.1 of ES Chapter 5 Project Description. It is therefore not possible to detail a single, overall worst case for the project. ES Chapters 8 to 31 detail the worst case scenario for each receptor and impact. Chapter 5 of the ES provides the full Project Description and the draft DCO provides the maximum parameters for the project as a whole.
Location of drilling operations for trenchless crossings	Rep 117	The Environment Agency will have prior approval of the CoCP (Requirement 20 of the DCO), which will be reflected in the updated draft DCO. The precise locations of drilling works are subject to detailed design.  These concerns are addressed in the SoCG with the Environment Agency.
Duration of construction surface water (flood risk) management measures	Rep 106	Construction surface water management measures will be maintained for the whole construction period in accordance with the Outline CoCP (document 8.1) and Requirement 20 of the DCO.  This is also addressed in the SoCGs with:  Natural England; Environment Agency; and Norfolk County Council.
Access routes	Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176,	Discussions with landowners regarding access routes are ongoing. Landowners will be given an access point across the cable corridor and haul route, as long as there are no concerns from an HSE perspective. Details on the length of





Topic/ Issue	Relevant Representation Number	Applicant Response
	Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 200, Rep 201, Rep 203, Rep 204, Rep 205, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	construction times are detailed within ES Chapter 5 and the Outline CoCP (Doc ref 8.1). Construction teams would work on a short length (approximately 150m section) and once the cable ducts have been installed, the section would be back filled and the top soil replaced before moving onto the next section. This would minimise the amount of land being worked on at any one time. Temporary means of access will be provided to severed fields for vehicles and machinery in order to ensure access is maintained wherever practicable and appropriate planning and timing of works will be agreed with landowners and occupiers, subject to individual agreements, to reduce conflicts.
		A commitment of no more than 20% of the haul road will need to be left in situ or reinstated during the construction phase of the Project. The Applicant's preferred position is to strip the top soil and use the subsoil to track over. Where this is not possible, temporary trackway may be used. In some extreme cases Type 1 may be required for a period of time however, this is seen as the worst case scenario.  The following submission documents are of relevance to this issue:
		<ul> <li>ES Chapter 5 Project Description;</li> <li>Design and Access Statement (document 8.3); and</li> <li>Outline CoCP (document 8.1).</li> </ul> This is also addressed in the SoCG with the National Farmers' Union (NFU).





# 1.4 Marine Geology, Oceanography and Physical Processes

#### Table 4 Applicant responses to Relevant Representations in relation to Marine Geology, Oceanography and Physical Processes

Topic/ Issue	Relevant Representation Number	Applicant Response
Sediment disposal	Rep 106, Rep 186	A commitment has been made by the Applicant to dispose of sediment arising from construction works within the Haisborough Hammond and Winterton Special Area of Conservation (SAC), back into the SAC as requested by the Marine Management Organisation (MMO) and Natural England during the Evidence Plan Process. This forms part of the embedded mitigation considered in the impact assessments in Chapter 8 Marine Geology, Oceanography and Physical Processes and Chapter 10 Benthic and Intertidal Ecology. This commitment is also detailed in the Site Characterisation Report (document 8.15). The Impacts of sediment disposal are assessed in each relevant ES chapter and the Site Characterisation Report.  Comments regarding sediment disposal in the Haisborough
		Hammond and Winterton SAC are addressed in the SoCG with the following stakeholders:  • MMO; and • Natural England
Haisborough Hammond and Winterton SAC – Sandbanks and sandwave levelling	Rep 106, Rep 186	Impacts on Annex 1 Sandbanks of the Haisborough Hammond and Winterton SAC are assessed in the following application documents:  • ES Chapter 8 Marine Geology, Oceanography and Physical Processes;
		ES Chapter 10 Benthic and Intertidal Ecology; and





Topic/ Issue	Relevant Representation Number	Applicant Response
		<ul> <li>Information to Support Habitats Regulations         Assessment (HRA) report.</li> <li>Comments regarding Annex 1 Sandbanks are addressed in the         SoCG with the following stakeholders:         <ul> <li>MMO; and</li> <li>Natural England.</li> </ul> </li> </ul>
Monitoring	Rep 106; Rep 186	The In Principle Monitoring Plan (document 8.12) outlines proposed monitoring for the project. This provides a framework for agreeing monitoring with the MMO prior to construction.  Comments regarding monitoring are also addressed in the SoCG with the following stakeholders:  • MMO; and • Natural England.
Coastal erosion	Rep 10, Rep 14, Rep 48, Rep 78, Rep 73, Rep 103, Rep 106, Rep 108, Rep 124, Rep 137, Rep 138, Rep 169, Rep 196, Rep 208, Rep 228, Rep 229, Rep 249, Rep 254, Rep 258, Rep 123	The landfall is located along a section of Norfolk coastline which is fronted by unprotected cliffs which are subject to dynamic natural processes. This area of the coastline is considered within the Kelling to Lowestoft Shoreline Management Plan (SMP) published and adopted by North Norfolk District Council (NNDC) in 2012. The shoreline policy is 'Managed Realignment' at the landfall and as such forecast erosion rates presented by the SMP and further analysis as part of a coastal erosion study presented in Appendix 4.3 of the ES have been, and will continue to be, considered in the design of the landfall.
		The landfall design will mitigate against impacts to or from coastal erosion processes over the lifetime of the project. The Applicant's methodology is underpinned by the following





Topic/ Issue	Relevant Representation Number	Applicant Response
		principles and decisions, which ensure the landfall will have no significant impact on either the cliffs or the beach:
		<ul> <li>Landfall compound zone (and location of Horizontal Directional Drilling (HDD) entry and subsequent transition pit) is setback from the current cliff edge by at least 125m to allow for forecast coastal processes. Furthermore, the landfall compound zone currently extends a further 200m inland to allow flexibility in the siting of the landfall post consent, during detailed design, using the most up to date information and forecasts.</li> <li>Use of long HDD method prevents the requirement for surface excavations on the beach or at the existing cliff face which could act as weak points during storm events.</li> <li>Ground investigations (boreholes) within the landfall compound zone, conducted in 2017, to a depth of 20m below ground level, have shown that the land is primarily dense sands and clay soils which are suitable for the HDD installation method.</li> <li>The drill profile is proposed to be sufficiently far back from the cliff face and deep enough below the beach to ensure the ducts will not become exposed during the operational lifetime of the wind farm as a result of coastal processes and will not impact on the stability of</li> </ul>
		the cliff or beach as a result of vibration or fracturing.
		This information has been published in the Landfall Information Sheet, made available pre-examination on the <u>project website</u>





Topic/ Issue	Relevant Representation Number	Applicant Response
		and submitted with Deadline 1 (document reference ExA;AS;10.D1.8B):
		This issue is dealt with in more detail in the following submission documents:
		<ul> <li>Appendix 4.1 of the ES (Coastal Erosion Study)</li> <li>ES Chapter 8 Marine Geology, Oceanography and Physical Processes</li> <li>Chapter 17 of the Consultation Report - Overview of Non-Statutory Consultation and influence on the Project</li> <li>Chapter 23 of the Consultation Report - Summary of Responses received under Section 47 of the 2008 Act</li> <li>Appendix 4.2 of the Consultation Report - FAQ Documents</li> <li>Appendix 20.9 of the Consultation Report - Consultation Summary Document</li> <li>Appendix 22.1 of the Consultation Report - Section 42 Responses and regard had by the Applicant</li> </ul>
		Comments regarding erosion at Happisburgh are addressed in the SoCG with the following stakeholders:
		<ul> <li>Norfolk County Council;</li> <li>Natural England; and</li> <li>Happisburgh Parish Council (draft in progress)</li> </ul>
Scour protection	Rep 106	The impacts of scour protection are assessed in Chapter 8 Marine Geology, Oceanography and Physical Processes and Chapter 10 Benthic and Intertidal Ecology, with the impact of permanent habitat loss assessed in Chapter 10.





Topic/ Issue	Relevant Representation Number	Applicant Response
		Scour and cable protection are included in the Outline Scour Protection and Cable Protection Plan (document 8.16); this is based on currently available information and will be followed with a more detailed plan as the design of the project develops. The final Scour Protection and Cable Protection Plan will be agreed with the MMO.  Scour protection and the Scour Protection and Cable Protection Plan are addressed in the SoCG with Natural England.
References	Rep 106	Natural England comments that the following reference is now old:  BERR. (2008). Review of Cabling Techniques and Environmental Effects applicable to the Offshore Windfarm Industry.
		It is acknowledged that Natural England has produced a report (Natural England Offshore wind cabling: ten years experience and recommendations, July 2018) since the submission of the Norfolk Vanguard application. The 2018 Natural England report has been considered and does not alter the information presented in the Norfolk Vanguard ES, as many of these lessons learned referenced in the report were shared by Natural England during the Evidence Plan Process and have therefore been considered during the EIA process.





# 1.5 Marine Water and Sediment Quality

#### Table 5 Applicant responses to Relevant Representations in relation to Marine Water and Sediment Quality

Topic/ Issue	Relevant Representation Number	Applicant Response
Impacts of J tube and ladder cleaning	Rep 106, Rep 186	Comments regarding the impacts of J tube and ladder cleaning are addressed in the SoCG with the following stakeholders:  Natural England; and MMO.

### 1.6 Benthic and Intertidal Ecology

#### Table 6 Applicant responses to Relevant Representations in relation to Benthic and Intertidal Ecology

Topic/ Issue	Relevant Representation Number	Applicant Response
Haisborough Hammond and Winterton SAC – Sabellaria reef	Rep 106, Rep 180, Rep 186	Potential impacts on <i>Sabellaria spinulosa</i> reef have been considered within the following submission documents:
		<ul> <li>ES Chapter 10 Benthic and Intertidal Ecology; and</li> <li>Information to Support HRA Report.</li> </ul>
		Comments regarding mitigation of impacts on <i>S. spinulosa</i> reef in the Haisborough Hammond and Winterton SAC are addressed in the SoCG with the following stakeholders:
		<ul> <li>MMO;</li> <li>Natural England; and</li> <li>Eastern Inshore Fisheries and Conservation Agency (IFCA)</li> </ul>
Cable protection	Rep 106, Rep 180, Rep 186	Comments include seeking further details on the type, extent and location of cable protection.





Topic/ Issue	Relevant Representation Number	Applicant Response
		Scour and cable protection are included in the Outline Scour Protection and Cable Protection Plan (document 8.16), based on currently available information, and which will be followed with a more detailed plan as the design of the project develops. The Scour Protection and Cable Protection Plan will be agreed with the MMO.  Comments regarding cable protection are addressed in the SoCG with the following stakeholders:  Natural England; MMO; and Eastern IFCA
Byelaw areas	Rep 106, Rep 180	The Applicant will take into consideration fishing closures as they come into place.  Mitigation and management measures associated with the restoration conservation objective of the Haisborough Hammond and Winterton SAC will be addressed through the SoCG with Natural England.
Marine Conservation Zone (MCZ)	Rep 106, Rep 180	Comments regarding the indirect impacts on the Cromer Shoal Chalk Beds MCZ are addressed in the SoCG with Natural England.
Monitoring	Rep 106, Rep 186	The In Principle Monitoring Plan (document 8.12) outlines proposed monitoring for the project. This provides a framework for agreeing monitoring with the MMO prior to construction.  Comments regarding monitoring are also addressed in the SoCG with the following stakeholders:  • MMO; and • Natural England
Decommissioning	Rep 186	Impacts associated with decommissioning are assessed in each technical chapter of the ES. No offshore works may commence until a written decommissioning programme in





Topic/ Issue	Relevant Representation Number	Applicant Response
		compliance with any notice served upon the undertaker by the Secretary of State pursuant to section 105(2) of the 2004 Act has been submitted to the Secretary of State for approval as required under DCO Schedule 1 Part 3, requirement 14.  Comments regarding decommissioning are addressed in the SoCG with the MMO.
Maintenance activities	Rep 106, Rep 186	Maintenance activities are detailed in Chapter 5 Project Description of the ES and assessed in each technical chapter of the ES and Information to Support HRA report.  A summary of operation and maintenance activities is provided in the Outline Offshore Operations and Maintenance Plan (document 8.11)  Comments regarding maintenance activities are addressed in the SoCG with Natural England.
References	Rep 106, Rep 186	Reference is made to CWind 2017, unpublished in the ES. This should have been referred to as Appendix 5.1 of the ES.

# 1.7 Fish and Shellfish Ecology

## Table 7 Applicant responses to Relevant Representations in relation to Fish and Shellfish Ecology

Topic/ Issue	Relevant Representation Number	Applicant Response
Monitoring	Rep 106, Rep 186	In line with good practice, monitoring must have a clear purpose in order to provide answers to specific questions where significant environmental impacts have been identified. Monitoring should be targeted to address significant evidence gaps or uncertainty, which are relevant to the project and can be realistically filled. In this instance it is proposed that no further monitoring or independent surveys are required. The In Principle Monitoring Plan (document 8.12) provides a framework for agreeing monitoring with the MMO prior to construction.





Topic/ Issue	Relevant Representation Number	Applicant Response
		Comments regarding monitoring are addressed in the SoCG with the following stakeholders:  • MMO; and • Natural England
Underwater noise	Rep 186	The assessment refers to and considers the most appropriate and recommended peer- reviewed impact criteria for fish. Modelling has also been undertaken using peer- reviewed criteria for a complete assessment.
		Although no noise reduction mitigation is proposed for fish due to the conclusions of the EIA, any mitigation required for marine mammals would also benefit fish and shellfish.
		Monitoring of underwater noise is included in the In Principle Monitoring Plan (document 8.12) and mitigation of underwater noise is addressed in the SoCG with the MMO.
Electromagnetic Fields (EMF)	Rep 180	The ES has taken into consideration current data and information regarding potential EMF from subsea cables. This issue has been considered within ES Chapter 11 Fish and Shellfish Ecology.
		EMF are addressed in the SoCG with the following stakeholders:
		<ul> <li>Eastern IFCA; and</li> <li>National Federation of Fishermen's Organisation (NFFO)</li> </ul>
Cumulative Impact Assessment (CIA)	Rep 180	Cumulative impacts are assessed in Chapter 11 Fish and Shellfish Ecology. Comments regarding the CIA are addressed in the SoCG with the Eastern IFCA.





#### 1.8 Marine Mammals

**Table 8 Applicant responses to Relevant Representations in relation to Marine Mammals** 

Topic/ Issue	Relevant Representation Number	Applicant Response
Impact to marine animals e.g. seals (general comment)	Rep 166, Rep 228, Rep 229	<ul> <li>Further information relating to this issue can be found in the following submission documents:         <ul> <li>ES Chapter 12 Marine Mammals</li> <li>Chapter 17 of the Consultation Report - Overview of Non-Statutory Consultation and influence on the Project</li> <li>Appendix 3.1 – Hearing Your Views I (interim consultation report) Plus also see Hearing Your Views I Summary Report <a href="https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/norfolk-vanguard-october-2016-drop-in-summary-report.pdf">https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/norfolk-vanguard/summary-report.pdf</a>)</li> </ul> </li> <li>Appendix 3.2 – Hearing Your Views III (interim consultation report)         <ul> <li>Appendix 3.3 – Hearing Your Views III (interim consultation report)</li> <li>Appendix 12.7 – Phase I Non- Statutory Public Exhibition Materials</li> <li>Appendix 12.8 – Phase II Non- Statutory Public Exhibition Materials</li> <li>Appendix 13.2 of the Consultation Report – March 2017 Newsletter</li> <li>Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant</li> </ul> </li> </ul>
Underwater noise impacts and mitigation	Rep 13, Rep 106, Rep 172, Rep 186	The assessment provided in ES Chapter 12 Marine mammals considers the most appropriate and recommended impact criteria for marine mammals.  In the event of piling, a Marine Mammal Mitigation Protocol (MMMP), in accordance with the draft Marine Mammal Mitigation Protocol (DCO document 8.13), will be developed in the pre-construction period. This plan must be agreed by the relevant





Topic/ Issue	Relevant Representation Number	Applicant Response
		statutory nature conservation bodies and is intended to prevent injury to marine mammals following current best practice, information and methodologies.  Comments regarding underwater noise are addressed in the SoCG with the following stakeholders:  • MMO;  • Natural England;  • The Wildlife Trusts; and  • Whale and Dolphin Conservation
Cumulative Impacts of Underwater noise	Rep 13, Rep 106, Rep 172, Rep 186, Rep 270	ES Chapter 12 Marine mammals provides the cumulative and transboundary impact assessment, including impacts of underwater noise.  The approach to the CIA and the projects included within the assessment are agreed with the following stakeholders, as shown in the SoCG:  • MMO;  • Natural England; and  • Whale and Dolphin Conservation
Cumulative Impact Assessment – Inclusion of commercial fisheries	Rep 172	Comments regarding the inclusion of commercial fisheries in the CIA are included in the SoCG with The Wildlife Trusts.
In Principle Site Integrity Plan (SIP)	Rep 186, Rep 106, Rep 172	The SIP format follows that agreed for other consented projects (for example East Anglia THREE Offshore Wind Farm Order 2017), providing the framework for mitigation to be agreed pre-construction based on the final project design and latest scientific understanding.





Topic/ Issue	Relevant Representation Number	Applicant Response
		The In Principle SIP (document 8.17) is based on information currently available, however a final SIP will provide additional details and mitigation which will take account of final design build scenarios/programmes.
		The potential in-combination effects are assessed in the Information to Support HRA report and ES Chapter 12 Marine Mammals.
		Comments regarding the In Principle SIP are addressed in the SoCG with the following stakeholders:
		<ul> <li>MMO;</li> <li>Natural England;</li> <li>The Wildlife Trusts; and</li> <li>Whale and Dolphin Conservation.</li> </ul>
Monitoring	Rep 172, Rep 186	The In Principle Monitoring Plan (document 8.12) outlines proposed monitoring for the project. This provides a framework for agreeing monitoring with the MMO prior to construction.
		Comments regarding monitoring of marine mammals, and the In Principle Monitoring Plan are addressed in the SoCG with the following stakeholders:
		<ul> <li>MMO;</li> <li>The Wildlife Trusts; and</li> <li>Whale and Dolphin Conservation.</li> </ul>
Changes to prey resource	Rep 180	Chapter 12 Marine Mammals assesses the inter-relationship with fish ecology in relation to changes to prey availability for marine mammals. The cumulative impact of changes to prey is deemed to be of minor significance for harbour porpoise and grey seal and negligible for harbour seal.
		Comments regarding impacts on sandeel as a prey resource for marine mammals are addressed in the SoCG with the Eastern IFCA.





Topic/ Issue	Relevant Representation Number	Applicant Response
Unexploded Ordnance (UXO)	Rep 106, Rep 186	It is agreed that UXO is not included in the DCO application and will require separate licencing once the extent and type of UXO clearance is known.  Comments regarding UXO are addressed in the SoCG with the following stakeholders:  • MMO; and • Natural England.

# 1.9 Offshore Ornithology

**Table 9 Applicant responses to Relevant Representations in relation to Offshore Ornithology** 

Topic/ Issue	Relevant Representation Number	Applicant Response
Assignment of months to biological seasons	Rep 106, Rep 197	The assignment of months to biological seasons for each species assessed has been reviewed and amended as appropriate. This applies to several aspects of the assessment and has been discussed and updated outputs provided (as necessary) in the following additional submissions:
		Norfolk Vanguard Offshore Wind Farm Offshore Ornithology: Collision Risk Modelling: update and clarification (Appendix 3.2 to the applicant's response to Examiners first written questions, document reference ExA;WQApp3.2;10.D1.3).
		Norfolk Vanguard Offshore Wind Farm Offshore Ornithology: Operational Auk Displacement: update and clarification (Appendix 3.3 to the applicant's response to Examiners first written questions, document reference ExA;WQApp3.3;10.D1.3).
Population consequences	Rep 106	This is being discussed with Natural England and the RSPB through Statements of Common Ground.





Topic/ Issue	Relevant Representation Number	Applicant Response
Collision risk modelling	Rep 106, Rep 197	The input parameters used to undertake the collision modelling have been provided, together with additional discussion about the methods used and comparisons with outputs from the deterministic Band collision model and the Marine Scotland stochastic version. These are presented in Norfolk Vanguard Offshore Wind Farm Offshore Ornithology: Collision Risk Modelling: update and clarification (Appendix 3.2 to the applicant's response to Examiners first written questions, document reference ExA;WQApp3.2;10.D1.3).
Displacement	Rep 106, Rep 197	Displacement tables have been updated and submitted as appendices to the applicant's response to the Examiners first written questions (Norfolk Vanguard Offshore Wind Farm Offshore Ornithology: Operational Auk Displacement: update and clarification (Appendix 3.3 to the applicant's response to Examiners first written questions, document reference ExA;WQApp3.3;10.D1.3) and Norfolk Vanguard Offshore Wind Farm Offshore Ornithology: Red-throated diver Displacement (Appendix 3.1 to the applicant's response to Examiners first written questions, document reference ExA;WQApp3.1;10.D1.3)).
		Further consideration will be given to potential connectivity and impacts on the guillemot and razorbill populations of the Bruine Bank potential Special Protection Area (pSPA).
Alde-Ore Estuary Special Protection Area (SPA)	Rep 106, Rep 197	The Alde-Ore Estuary SPA assessment of potential collision impacts for lesser black-backed gull will be reviewed and revised as appropriate. This will make use of any updates following the review and revision of the collision risk modelling as noted above.  The estimation of populations with potential connectivity to Norfolk Vanguard has also been be reviewed (summarised in the response to the Examiners first written questions) and this will be used to update this assessment as appropriate.





Topic/ Issue	Relevant Representation Number	Applicant Response
		Further discussion about the potential for mitigation to enhance the conservation status of the breeding population has also been provided in the response to Examiners first written questions.
Flamborough and Filey Coast SPA	Rep 106, Rep 197	The Flamborough and Filey Coast SPA assessment of potential impacts on gannet and kittiwake will be reviewed and revised as appropriate, taking into account the additional discussion about collision risk modelling noted above (Norfolk Vanguard Offshore Wind Farm Offshore Ornithology: Collision Risk Modelling: update and clarification, Appendix 3.2 to the applicant's response to Examiners first written questions, document reference ExA;WQApp3.2;10.D1.3). In addition, the screening will be reviewed taking into account the review and update of displacement impacts noted above (Norfolk Vanguard Offshore Wind Farm Offshore Ornithology: Operational Auk Displacement: update and clarification, Appendix 3.3 to the applicant's response to Examiners first written questions, document reference ExA;WQApp3.3;10.D1.3). The potential for combined collision and displacement impacts for gannet will also be considered.  The RSPB kittiwake tracking data for the 2017 breeding season has been supplied to the
		Applicant and analysis of these data is underway. It is anticipated that the results of this analysis will provide further evidence on which to base estimates of connectivity with the SPA population. The results will therefore be used to update the assessment as appropriate.
Greater Wash SPA	Rep 106	The Greater Wash SPA assessment of potential impacts for red-throated diver and little gull will be reviewed and revised as appropriate, following the review and revision of the collision risk modelling and displacement assessments noted above.
Transboundary	Rep 271	The Applicant notes the response from Rijkwaterstaat in relation to cumulative ornithological impacts within the southern North Sea, and in particular with reference to the future planned wind farms in Dutch waters. The Applicant will give consideration to the available information for the wind farms identified by Rijkwaterstaat. However, the





Topic/ Issue	Relevant Representation Number	Applicant Response
		Applicant also notes that the cumulative assessment in the Roadmap referred to by Rijkwaterstaat ( <a href="https://www.noordzeeloket.nl/en/functions-and-use/offshore-wind-energy/routekaart/">https://www.noordzeeloket.nl/en/functions-and-use/offshore-wind-energy/routekaart/</a> ), which includes UK wind farms, reached a conclusion that the cumulative effects on birds would not be ecologically significant for the vast majority of species, and for those for which a potential impact was predicted (large gull collision risk) this was obtained due to highly precautionary assumptions (e.g. 3MW turbines).

#### 1.10 Commercial Fisheries

**Table 10 Applicant responses to Relevant Representations in relation to Commercial Fisheries** 

Topic/ Issue	Relevant Representation Number	Applicant Response
Mitigation and coexistence	Rep 51, Rep 180, Rep 186	Mitigation measures are included in ES Chapter 14 Commercial Fisheries and in the Outline Project Environmental Monitoring Plan (PEMP) (document 8.14). Requirement 14(1)(d) of the Generation DML states:  "  (iv) the appointment and responsibilities of a fisheries liaison officer; and (v) a fisheries liaison and coexistence plan to ensure relevant fishing fleets are notified of commencement of licensed activities pursuant to condition 9 and to address the interaction of the licensed activities with fishing activities."  Mitigation with respect to commercial fisheries is addressed in the SoCG with the following stakeholders:  MMO;  Eastern IFCA; and  NFFO.





Topic/ Issue	Relevant Representation Number	Applicant Response
Monitoring	Rep 186	No commercial fish monitoring is proposed, however the In Principle Monitoring Plan provides a framework for agreeing monitoring with the MMO prior to construction.

# 1.11 Shipping and Navigation

Table 11 Applicant responses to Relevant Representations in relation to Shipping and Navigation

Topic/ Issue	Relevant Representation Number	Applicant Response
Navigational Safety	Rep 19, Rep 60, Rep 187	This issue is addressed in ES Chapter 15 Shipping and Navigation.  Appropriate aids to navigation will be developed post-consent and agreed with the Marine and Coastguard Agency (MCA) and Trinity House (TH) in accordance with DML Condition 10.  An application will be submitted post-consent for safety zones of up to 500m during construction, major maintenance and decommissioning phases; and 50m pre-commissioning.  Agreements in relation to navigational safety are addressed in the SoCG with  MCA;  Royal Yachting Association (RYA); and  TH.
Mitigation	Rep 19, Rep 187	ES Chapter 15 notes that an Emergency Response Cooperation Plan will need to be in place and agreed with the MCA prior to any offshore construction (and during the operation and maintenance phase) as part of the embedded mitigation for the project and in accordance with DML Condition 15.





Topic/ Issue	Relevant Representation Number	Applicant Response
		As required by MGN 543, detailed and accurate hydrographic surveys will be undertaken periodically and in accordance with DML Condition 15(5).
		A cable specification, installation and monitoring plan (DML Condition 15(1)(g)) and a Cable Burial Risk Assessment (DML Condition 14(g)) will also be submitted as per and will include an assessment of any reductions in water depth arising from the implementation of cable protection.
		Mitigation for shipping and navigation is addressed in the SoCG with
		<ul><li>MCA;</li><li>RYA; and</li><li>TH.</li></ul>
Turbine design and layout (including cumulative effects)	Rep 187	This issue is addressed in ES Chapter 15 Shipping and Navigation.
		The final turbine layout design will be approved by the MCA post-consent in accordance with DML Condition 14 (1)(a)(i).
		The cumulative (and in-combination) assessment of potential changes to Shipping and Navigation concludes no cumulative impacts will be significant in EIA terms. This includes a requirement that communication is under taken with East Anglia Three and updates to the Southern North Sea Offshore Wind Forum assessment by the Applicant.
		This issue is also addressed in the SoCG with:
		<ul><li>MCA; and</li><li>Trinity House (TH).</li></ul>





### 1.12 Offshore Archaeology

Table 12 Applicant responses to Relevant Representations in relation to Offshore Archaeology

Topic/ Issue	Relevant Representation Number	Applicant Response
Written Scheme of Investigation (offshore)	Rep 183	The Applicant has committed to produce a Written Scheme of Investigation (WSI) (in accordance with the Outline WSI (offshore; document 8.6)) and agree this with Historic England.  Comments regarding the WSI are addressed through the SoCG with Historic England.

#### 1.13 Infrastructure and Other Users

Table 13 Applicant responses to Relevant Representations in relation to Infrastructure and Other Users

Topic/ Issue	Relevant Representation Number	Applicant Response
Protective Provisions	Rep 68	Matters relating to layout, design, and proximity arrangements between NV East and East Anglia THREE Limited (EATL) will be addressed through an existing Co-operation Agreement between Vattenfall Wind Power Ltd (parent company of Norfolk Vanguard Limited) and Scottish Power Renewables (parent company of EATL).  Comments regarding cumulative and in-combination issues are addressed through the SoCG with EATL.





#### 1.14 Ground Conditions and Contamination

#### **Table 14 Applicant responses to Relevant Representations in relation to Ground Conditions and Contamination**

Topic/ Issue	Relevant Representation Number	Applicant Response
Mineral Safeguard Areas (MSA)	Rep 123	Concerns regarding MSAs are addressed in the SoCG with Norfolk County Council.
Bentonite or other fluid release during trenchless crossings	Rep 106, Rep 117	The Applicant has committed to managing bentonite breakouts and further detail will be provided in an updated CoCP (Requirement 20 of the DCO). This issue is also addressed in the SoCG with the following stakeholders:  • Environment Agency; and • Natural England.
Mobilising contaminants	Rep 117	Concerns regarding mobilisation contaminants is addressed in the SoCG with the Environment Agency.
Private water abstractions and shallow wells close to excavations	Rep 117	Concerns regarding private water abstractions are addressed in the SoCG with the Environment Agency.
Concerns regarding potential contamination at a military plane crash site near to Necton	Rep 4, Rep 11, Rep 16, Rep 18, Rep 20, Rep 25, Rep 26, Rep 27, Rep 29, Rep 30, Rep 36, Rep 37, Rep 43, Rep 45, Rep 49, Rep 66, Rep 77, Rep 100, Rep 104, Rep 105, Rep 114, Rep 122, Rep 128, Rep 130, Rep 131, Rep 132, Rep 133, Rep 136, Rep 154, Rep 155, Rep 171, Rep 198, Rep 226, Rep 231, Rep 243, Rep 244, Rep 253, Rep 256, Rep 259, Rep 261	The Applicant received anecdotal information initially in Summer 2018 regarding reports of a plane crash within a few hundred metres of the proposed cable corridor. Further correspondence (late August and September 2018) was received from Breckland Council raising concerns regarding the potential presence of hydrazine fuel and radioactive materials at a site within this general area.  The Applicant has set out the approach to assessing potential contaminated sites in the ES Chapter 19 Ground Conditions, which would be undertaken post-consent. The approach to assessment has been discussed and agreed with relevant stakeholders, for example the Environment Agency and Norfolk County Council, as part of the pre-





Topic/ Issue	Relevant Representation Number	Applicant Response
		application process, whereby expert topic groups were established to ensure that the assessments were being undertaken in a satisfactory way.  The proposed mitigation provided in the Outline CoCP (document 8.1) includes a commitment to providing a written scheme for dealing with contamination of any land and groundwater. The scheme will include site investigation at sites known to have a potential contamination risk, including the site of the plane crash. The written scheme will also set out protocols for dealing with any contamination, as required. These protocols will be set in place prior to construction to ensure that procedures are known and agreed with the Regulators should contaminated materials be encountered.  This issue is also addressed in the SoCG with the Environment Agency.
Hazardous substance consent	Rep 156	The Applicant has set out the approach to assessment of contamination risks in the ES Chapter 19 Ground Conditions  The proposed mitigation provided in the Outline CoCP (document 8.1) includes a commitment to providing a Site and Excavated Waste Management Plan.

## 1.15 Water Resources and Flood Risk

#### Table 15 Applicant responses to Relevant Representations in relation to Water Resources and Flood Risk

Topic/ Issue	Relevant Representation Number	Applicant Response
Flood risk (General/not location specific)	Rep 206, Rep 209, Rep 210, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 219, Rep 220, Rep 223, Rep 224	<ul> <li>The issues raised have been considered within the following submission documents:</li> <li>ES Chapter 20 Water Resources and Flood Risk (DCO document 6.1).</li> <li>Appendix 12.08 of the Consultation Report - Phase II Non-Statutory Exhibition Materials</li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
		<ul> <li>Chapter 9 of the Consultation Report – The Evidence Plan Process and Phase 0         Early Non-Statutory Technical Consultation</li> <li>Chapter 17 of the Consultation Report – Overview of Non-Statutory         Consultation and influence on the Project</li> <li>Chapter 23 of the Consultation Report – Summary of Responses under Section         47 of the 2008 Act</li> <li>Appendix 14.8 of the Consultation Report – Necton Substation Workshop         Presentations</li> <li>Appendix 22.1 of the Consultation Report – Section 42 Responses and regard         had by the Applicant</li> </ul>
Flood Risk (in area around landfall)	Rep 108, Rep 124, Rep 208, Rep 228	<ul> <li>The issues raised have been considered within the following submission documents:</li> <li>ES Chapter 20 Water Resources and Flood Risk (DCO document 6.1).</li> <li>Chapter 9 of the Consultation Report – The Evidence Plan Process and Phase 0 Early Non-Statutory Technical Consultation</li> <li>Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project</li> <li>Chapter 23 of the Consultation Report – Summary of Responses under Section 47 of the 2008 Act</li> <li>Appendix 12.08 of the Consultation Report - Phase II Non-Statutory Exhibition Materials</li> <li>Appendix 4.2 of the Consultation Report – FAQ Documents</li> <li>Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant</li> </ul>
Flood Risk (in area around onshore project substation)	Rep 15, Rep 16, Rep 16, Rep 18, Rep 25, Rep 27, Rep 28, Rep 29, Rep 35, Rep 56, Rep 64, Rep 65, Rep 66, Rep 75, Rep 88, Rep 99, Rep 104, Rep 105, Rep 111, Rep 114, Rep 116, Rep 121, Rep 122, Rep	The Applicant's design of flood risk mitigation at the project substation site will ensure that there will be no negative impact on existing flood risk to the site, or surrounding areas. The onshore project substation and National Grid substation extension drainage strategy will be guided by the principle of Sustainable Urban Drainage Systems (SuDS). The strategy will limit development site surface water run-off to the existing greenfield





Topic/ Issue	Relevant Representation Number	Applicant Response
	128, Rep 130, Rep 132, Rep 217, Rep 231, Rep 242, Rep 243, Rep 256, Rep 259	rate, with sufficient attenuation for rainfall events up to 1 in 100-year probability plus allowance for climate change over the lifetime of the project. Further information can be found in the following submission documents:  • ES Chapter 20 Water Resources and Flood Risk (DCO document 6.1).  • Chapter 9 of the Consultation Report – The Evidence Plan Process and Phase 0 Early Non-Statutory Technical Consultation  • Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project  • Chapter 23 of the Consultation Report – Summary of Responses under Section 47 of the 2008 Act  • Appendix 4.2 of the Consultation Report – FAQ Documents  • Appendix 12.08 of the Consultation Report - Phase II Non-Statutory Exhibition Materials  • Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant
Flood risk – secondary consents	Rep 123	Concerns regarding additional flood risk consent are addressed in the SoCG with Norfolk County Council.
Flood risk measures – detailed design  Climate change rainfall event Greenfield runoff Infiltration testing Sustainable Drainage Systems Attenuation Maintenance	Rep 117, Rep 123	Concerns regarding the detailed design of flood risk measures are addressed in the SoCG with the following stakeholders:  • Norfolk County Council; and • Environment Agency.





Topic/ Issue	Relevant Representation Number	Applicant Response
Flood flow route / spoil storage		
Flood risk - Surface water runoff from the haul road or construction compounds	Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	The Outline CoCP (DCO document 8.1) provides details of the principles of construction drainage, with an acknowledgement that a detailed Surface Water and Drainage Plan (Requirement 20 (2)(i)) of the DCO will be developed post-consent and agreed with the relevant regulators.  Since DCO submission, the Applicant has conducted a full cable route engineering visual inspection (where access allowed – approximately 85% of cable route length) to gather information of existing above ground drainage arrangements and details of existing drainage arrangements (particularly subsurface) have been requested from landowners. This information will be used to develop the Surface Water and Drainage Plan in due course, in fulfilment of DCO requirement 20 (2)(i).
Watercourse crossings – methods and approval (Internal Drainage Board (IDB)), early consultation, use of open cut method (e.g. Blackwater Drain)	Rep 106, Rep 123	Concerns regarding watercourse crossings are addressed in the SoCGs with the following stakeholders:  Norfolk County Council; Environment Agency; and Natural England.
Culvert use – approvals and mitigation	Rep 123	Permanent culvert crossings will be considered only for watercourse crossings where the drainage channels are deeper than 1.5m. A cable route walkover survey conducted by Norfolk Vanguard in October 2018 noted that the likelihood of any permanent culverted crossings is low with the majority of the drainage channels being less than 1.5m in depth or already part of a committed trenchless crossing method, i.e. the majority of culverts proposed are temporary and for construction access only.





Topic/ Issue	Relevant Representation Number	Applicant Response
		<ul> <li>The Applicant will avoid the use of permanent culverts where possible and instead use the alternative dam and divert crossing techniques. If permanent culverts are required, however, their impacts would be mitigated by:</li> <li>Ensuring that the culvert is adequately sized to avoid impounding flows (including an allowance for potential increases in winter flows as a result of projected climate change); and</li> <li>Installing the culvert below the active bed of the channel, so that sediment continuity and movement of fish and aquatic invertebrates can be maintained.</li> <li>With reference to Requirement 25 of the draft DCO, a watercourse crossing schemes will be submitted to and approved by the relevant planning authority in consultation with Natural England, prior to the onshore transmission works commencing.</li> </ul>
Concern over assessment of unlicensed water supplies	Rep 117	Chapter 20 Water Resources and Flood Risk (DCO document 6.1) assigns unlicensed water supplies as being high sensitivity and high value to ensure a precautionary approach has been taken.  Concerns regarding unlicensed water supplies are addressed in the SoCG with the Environment Agency.
Contamination of water table	Rep 200	Assessment of the risk to the groundwater table has been undertaken, and can be found in ES Chapter 19 Ground Conditions and Contamination (DCO document 6.1).





### 1.16 Land Use

Table 16 Applicant responses to Relevant Representations in relation to Land Use

Topic/ Issue	Relevant Representation Number	Applicant Response
Query regarding Agricultural Land Classification (ALC) grades 3a and 3b.	Rep 106	The Natural England dataset for the onshore study area is not broken down into ALC grade 3a or 3b. The Applicant has calculated and assessed the total extent of land that will be permanently lost within ES Chapter 21 Land use and Agriculture (DCO document 6.1).  This is addressed in the SoCG with Natural England.
Concern over treating topsoil as 'single resource for stockpiling and reuse'	Rep 106	Topsoil will be stored and reinstated within the field it is excavated. The onshore cable duct installation will be undertaken in a sectionalised approach with teams working on a short length at a time (approximately 150m section). Excavated topsoil will be stored adjacent to the open trench. Once the cable ducts have been installed, each 150m section will be back filled and the top soil replaced before moving onto the next section. e.
Higher Level stewardship schemes not accurately represented in application documents	Rep 106	There are 'Entry Level Stewardship Scheme with Higher Level' components that are presented within the application ES Chapter 21 Land use and Agriculture (DCO document 6.1) and differentiated on the supporting figures.
Agriculture (including soil sterilisation, loss of agricultural land, general disruption to agriculture)	Rep 8, Rep 34, Rep 45, Rep 85, Rep 88, Rep 91, Rep 120, Rep 133, Rep 139, Rep 158, Rep 159, Rep 166, Rep 171, Rep 206, Rep 209, Rep 210, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 219, Rep 220, Rep 223, Rep 224, Rep 228, Rep 229, Rep 235, Rep 237, Rep	The decision to deploy HVDC transmission technology significantly reduces the easement width in relation to the onshore cable corridor from 100m to 45m, thereby minimising the loss of agricultural land required by the Project. Refer to ES Chapter 21 Land Use and Agriculture (DCO document 6.1).  Issues related to agriculture have been considered in part or in full in the following submission documents:  • ES Chapter 21 Land Use and Agriculture (DCO document 6.1).





Topic/ Issue	Relevant Representation Number	Applicant Response
	240, Rep 243, Rep 252, Rep 257, Rep 262	<ul> <li>Outline CoCP (document 8.1)</li> <li>Chapter 23 of the Consultation Report – Summary of Responses under Section 47 of the 2008 Act</li> <li>Appendix 13.9 of the Consultation Report – Landowner Information Pack</li> <li>Appendix 22.1 -of the Consultation Report- Section 42 Responses and regard had by the Applicant</li> <li>Appendix 25.13 of the Consultation Report – Landowner Information Pack (Version 2 – April 2018)</li> <li>SoCG with Natural England</li> <li>SoCG with NFU</li> </ul>
Laying of HVDC cables will reduce the impact on land operations and farm businesses	Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	This is correct. The Applicant has made the decision to deploy an HVDC transmission system, in part due to the concerns raised early on by members of the public, landowners, NFU and the National Trust.
Specific details on soil management during construction and access routes to be supplied by contractor once appointed	Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205,	Initial information has been set out in the Outline COCP (document 8.1) which includes commitments to produce a Soil Management Plan prior to construction, in accordance with Requirement 20 (2)(f) of the DCO.





Topic/ Issue	Relevant Representation Number	Applicant Response
	Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	
Effects on existing field drainage	Rep 146, Rep 147, Rep 148, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205, Rep 206, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	A local specialised drainage contractor will undertake surveys to locate drains and create drawings both pre- and post-construction, and ensure appropriate reinstatement. The pre-construction drainage plan will include provisions to minimise water within the working area and ensure ongoing drainage of surrounding land (section 8.1 of the Outline CoCP, document 8.1).  Since DCO submission, the Applicant has conducted a full cable route engineering visual inspection (where access allowed – approximately 85% of cable route length) to gather information of existing above ground drainage arrangements and have requested details of existing drainage arrangements (particularly subsurface) from landowners. This information will be used to develop the Surface Water and Drainage Plan in accordance with Requirement 20 (2) (i) of the DCO.
Detail regarding the treatment and reinstatement of soil during and after construction	Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205, Rep 206, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	This has been discussed with landowners and agreed ahead of the Heads of Terms (HOTs) being issued. Whilst the exact detail of the soil treatment and reinstatement works is not available at this time, it has been agreed that full records of the condition of the soil will take place pre- and post-instalment. Furthermore, the Outline CoCP (document 8.1) and cable installation methodology described in ES Chapter 5 Project Description (DCO document 6.1) provide initial information on this.





Topic/ Issue	Relevant Representation Number	Applicant Response
Effects on irrigation e.g. from dust	Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	The Outline CoCP (document 8.1) gives details on air quality management control measures to be implemented which includes dust management. This document informs the final CoCP to be agreed with the relevant planning authority through Requirement 20 of the DCO.
Impact on agricultural business/access	Rep 139, Rep 140, Rep 148, Rep 158, Rep 160, Rep 200, Rep 202	Assessment of the extent of impact to local agricultural businesses can be found in ES Chapter 21 Land Use and Agriculture (DCO document 6.1).
Agricultural surveys	Rep 134	Agricultural assessments of fields are outlined in ES Chapter 21 Land Use and Agriculture (DCO document 6.1).
Major hazard sites and pipelines	Rep 156	Existing onshore infrastructure including high pressure pipelines are assessed within Chapter 21 Land Use and Agriculture.  Protective provisions and crossing agreements are addressed in the SoCGs with:  Cadent Gas Limited; and NGET





# 1.17 Onshore Ecology

Table 17 Applicant responses to Relevant Representations in relation to Onshore Ecology

Topic/ Issue	Relevant Representation Number	Applicant Response
Impact to wildlife	Rep 2, Rep 3, Rep 14, Rep 15, Rep 44, Rep 47, Rep 52, Rep 53, Rep 54, Rep 71, Rep 77, Rep 78, Rep 79, Rep 82, Rep 87, Rep 89, Rep 95, Rep 96, Rep 105, Rep 111, Rep 121, Rep 124, Rep 134, Rep 137Rep 2, Rep 3, Rep 14, Rep 15, Rep 44, Rep 47, Rep 52, Rep 53, Rep 54, Rep 71, Rep 77, Rep 78, Rep 79, Rep 82, Rep 87, Rep 89, Rep 95, Rep 96, Rep 105, Rep 111, Rep 121, Rep 124, Rep 134, Rep 137, Rep 143, Rep 148, Rep 164, Rep 169, Rep 200, Rep 206, Rep 208, Rep 209, Rep 210, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 217, Rep 218, Rep 219, Rep 220, Rep 223, Rep 224, Rep 229, Rep 235, Rep 237, Rep 240, Rep 253, Rep 257, Rep 260, Rep 262, Rep 263, Rep 264	The Applicant has engaged with a wide range of statutory and non-statutory consultees through the Evidence Plan Process (EPP) and creation of expert topic groups.  Issues related to wildlife impacts have been considered in part or in full in the following submission documents:  ES Chapter 22 Onshore Ecology (DCO document 6.1).  ES Chapter 23 Onshore Ornithology (DCO document 6.1).  Chapter 9 of the Consultation Report – The Evidence Plan Process and Phase 0 Early Non-Statutory Technical Consultation  Chapter 23 of the Consultation Report – Summary of Responses under Section 47 of the 2008 Act  Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and Influence on the Project  Chapter 19 of the Consultation Report – Formal Consultation under Section 42 of the 2008 Act  Appendix 4.2 of the Consultation Report – Consultation Summary Document  Appendix 20.9 of the Consultation Report – Consultation Summary Document  Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant  SoCGs with Natural England, Norfolk County Council and The Wildlife Trusts
Insufficient detail on water quality measures     / sediment     management	Rep 117; Rep 106	The Outline CoCP (DCO document 8.1) and OLEMS (DCO document 8.7) set out the principles for sediment management. Site-specific detail will be developed post-consent when the design of each watercourse crossing is progressed.  The Applicant has committed to develop a detailed scheme and programme for each watercourse crossing, diversion and reinstatement, which will include site specific details regarding sediment management and pollution prevention measures. This scheme will





Topic/ Issue	Relevant Representation Number	Applicant Response
Applicable to all watercourse crossings		be submitted to and, approved by the relevant planning authority in consultation with Natural England. This commitment is secured through Requirement 25 (Watercourse Crossings) of the draft DCO.  Concerns regarding River Wensum SAC and other sensitive works locations are addressed in the SoCG with the following stakeholders:  • Environment Agency; and • Natural England.
River Wensum Drilling – Request to amend route to reduce height of drill location and reduce length of drill in this land holding.	Rep 163	An agreement has been reached with the affected landowner to amend the cable route and address these concerns. This is addressed in document Pre-ExA; Change Report; 9.3.
The Broads SAC and Norfolk Valley Fens SAC  Impacts on groundwater supply In-combination effects	Rep 106	Concerns regarding groundwater supply to these designated sites are addressed in the SoCG with Natural England.
Paston Great Barn SAC  • Impacts on barbastelle bats	Rep 106	Concerns regarding bat mitigation are addressed in the SoCG with Natural England.
Concerns that the onshore projects areas are important for bat species	Rep 4, Rep 20, Rep 26, Rep 30, Rep 54, Rep 65, Rep 121, Rep 122, Rep 131, Rep	Bat activity (foraging and/or commuting) has been detected throughout the surveyed areas. All bats are European Protected Species and are afforded the highest level of protection. The Applicant has sought to minimise potential impacts on bats through avoiding features such as woodland that could support bat roosts. Potential impacts are





Topic/ Issue	Relevant Representation Number	Applicant Response
	207, Rep 217, Rep 231, Rep 253, Rep 256, Rep 259	limited to temporary disturbance to foraging habitat, which the Applicant has committed to minimising by reducing the working width at hedgerow crossings, allowing compensatory growth nearby (with landowner permission), and fully reinstating hedgerows that are affected by the cable route following the completion of the works.
		The Applicant has also committed to mitigation planting to replace and improve ecological connections currently located within the onshore project substation footprint.
		A full assessment of impacts on bats is included within ES Chapter 22 Onshore Ecology and ES Appendix 22.4 (DCO document 6.1).
		Issues related to bats have been considered in part or in full in the following submission documents:
		<ul> <li>ES Chapter 22 Onshore Ecology (DCO document 6.1).</li> <li>Appendix 13.2 of the Consultation Report – March 2017 Newsletter</li> <li>Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant</li> <li>SoCG with Natural England</li> </ul>
Hedgerow replanting/mitigation/quality and requirement for management plan	Rep 106, Rep 123	The OLEMS (DCO document 8.7) sets out the principles for hedgerow mitigation. In advance of construction, site specific hedgerow mitigation will be detailed within the Ecological Management Plan (EMP) for that phase (Requirement 24 of the DCO). Natural England are a named consultee for the approval of each EMP under Requirement 24. of the DCO.
		Concerns regarding hedgerows are addressed in the SoCG with the following stakeholders:
		<ul> <li>Norfolk County Council; and</li> <li>Natural England.</li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
Concern over screening out of the following designated sites in the assessment:  Dereham Rush Meadow Site of Special Scientific Interest (SSSI) Holly Farm Meadow, Wendling SSSI Whitwell Common SSSI Booton Common SSSI	Rep 106	Concerns regarding these designated sites are addressed in the SoCG with Natural England.
Presence of a sand martin colony at Happisburgh cliffs	Rep 106, Rep 117	Concerns regarding sand martin are addressed in the SoCG with the following stakeholders:  • Environment Agency; and • Natural England.
Assessment of non-statutory designated sites e.g. County Wildlife Sites (CWS)	Rep 117	Concerns regarding CWS are addressed in the SoCG with the Environment Agency.
Open cut trenching impacts on fish passage	Rep 117	Concerns regarding open cut trenching in relation to fish passage are addressed in the SoCG with the Environment Agency.
Procedures for mitigating impacts to active badger setts.	Rep 106	Mitigation presented within the OLEMS applies to all active badger setts and will be captured in the EMP (Requirement 24 of the DCO).
Great-crested newt mitigation	Rep 168	Great-crested newt mitigation, including the new licensing procedure, is being discussed with Natural England. If necessary, the Applicant will apply for a European Protected





Topic/ Issue	Relevant Representation Number	Applicant Response
		Species Licence. Natural England has issued a letter of comfort (dated 29 May 2018) stating that they see no impediment to issuing a licence in the future.

# 1.18 Onshore Ornithology

Table 18 Applicant responses to Relevant Representations in relation to Onshore Ornithology

Topic/ Issue	Relevant Representation Number	Applicant Response
Broadland SPA/Ramsar site – concerns over scoping out of the HRA, additional measures requested (post-consent survey potentially required)	Rep 106	Concerns regarding survey effort at Broadland SPA/Ramsar are addressed in the SoCG with Natural England.
Concerns over 300m     buffer used for     screening     Cessation of works if     nesting birds found	Rep 106	The principles for nesting bird mitigation are presented within the OLEMS (DCO document 8.7) and site specific detail will be included in the EMP for each stage of the works (Requirement 24 of the DCO).  Concerns regarding screening distance for noise disturbance on birds and stopping works should nesting birds be found are addressed in the SoCG with Natural England.
Impact on onshore ornithology at landfall	Rep 14, Rep 124, Rep 228	Issues related to onshore ornithology have been considered in part or in full in the following submission documents:  • ES Chapter 23 Onshore Ornithology (DCO document 6.1).  • Chapter 23 of the Consultation Report – Summary of Responses under Section 47 of the 2008 Act  • Appendix 13.2 of the Consultation Report – March 2017 Newsletter





Topic/ Issue	Relevant Representation Number	Applicant Response
		Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant

# 1.19 Traffic and Transport

Table 19 Applicant responses to Relevant Representations in relation to Traffic and Transport

Topic/ Issue	Relevant Representation Number	Applicant Response
Disruption at landfall/near Happisburgh	Rep 14, Rep 73, Rep 76, Rep 78, Rep 108, Rep 110, Rep 124, Rep 137, Rep 138, Rep 169, Rep 196, Rep 208, Rep 228, Rep 232, Rep 245, Rep 249, Rep 254, Rep 255	The routes that will be required for construction traffic to access the works are provided within ES Chapter 24 Traffic and Transport and Figure 24.5 (DCO document 6.1).  Construction traffic will access works south of Happisburgh and will not use the road passing through Happisburgh Village itself. In addition, construction traffic will not use the beach car park at Happisburgh.
		Construction traffic will be managed in agreement with local highways through the Traffic Management Plan, which will be produced in line with the Outline Traffic Management Plan (DCO document 8.8). Due to the decision to proceed with HVDC technology, there will be a reduced potential impact on the local road system as a result of avoiding the construction of a cable relay station. During the main onshore cable corridor ducting phase, construction traffic will use the running track within the onshore cable corridor (. No stage of the onshore transmission works may commence until for that stage a final Traffic Management Plan has been submitted to and approved by the relevant planning authority in consultation with the highway authority. This is secured through Requirement 21.
		Issues related to traffic have been considered in part or in full in the following submission documents:
		<ul> <li>ES Chapter 24 Traffic and Transport (DCO document 6.1).</li> <li>Outline Traffic Management Plan (DCO document 8.8)</li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
		<ul> <li>Chapter 17 of the Consultation Report – Overview of the Non-Statutory Consultation and influence on the Project</li> <li>Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act</li> <li>Appendix 4.2 of the Consultation Report – FAQ Documents</li> <li>Appendix 3.3 of the Consultation Report – Hearing Your Views III (Interim consultation report)</li> <li>Appendix 13.9 of the Consultation Report – Landowner Information Pack (Version 1 – June 2017)</li> <li>Appendix 25.13 of the Consultation Report – Landowner Information Pack (Version 2 – April 2018)</li> <li>Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant</li> <li>Comments regarding disruption at Happisburgh are addressed in the SoCG with Happisburgh Parish Council (draft in progress).</li> </ul>
A47 – substation access	Rep 4, Rep 29, Rep 46, Rep 57, Rep 61, Rep 77, Rep 88, Rep 159, Rep 170, Rep 209, Rep 210, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 219, Rep 220, Rep 221, Rep 223, Rep 224, Rep 231, Rep 235, Rep 237, Rep 240, Rep 242, Rep 257, Rep 260, Rep 263, Rep 264	Substation access options off the A47 have been developed in consultation with Highways England. These are detailed in Appendix 24.21 of the application. The safety, environmental and infrastructure implications of various access options were considered as part of the application and it was concluded that there are three viable options for access off the A47 (or a combination of options), as included in the application.  Construction:  Option A. Utilising the existing Necton National Grid Substation access with restrictions on right-turn manoeuvres off the A47; and/or Option A1. Upgrading the existing Necton National Grid Substation access to a Design Manual for Roads and Bridges (DMRB) compliant access.  Operation: Option B. Construction of a new DMRB compliant access opposite 'Spicers Corner' junction.





Topic/ Issue	Relevant Representation Number	Applicant Response
		Issues related to substation access have been considered in part or in full in the following submission documents:  • ES Chapter 24 Traffic and Transport (DCO document 6.1)  • An Outline Access Management Plan (DCO document 8.10), which sets out details of the proposed access arrangements  • Outline Traffic Management Plan (DCO document 8.8)  • Chapter 14 of the Consultation Report – Phase IIb – Additional Non-Statutory Consultation – Workshops  • Chapter 17 of the Consultation Report – Overview of the Non-Statutory Consultation and influence on the Project  • Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act  • Appendix 14.8 of the Consultation Report – Necton Substation Workshop Presentations  • Appendix 20.14 of the Consultation Report – February 2018 Newsletter  • Appendix 20.9 of the Consultation Report – Consultation Summary Document  • Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant
		This information is also available in the Autumn 2018 Information sheet – Onshore Project Substation, available to view here: <a href="https://corporate.vattenfall.co.uk/contentassets/bf0e5e31bbab467eaf02040c7b17513a/180-vattenfall-substation-info-sheet.pdf">https://corporate.vattenfall.co.uk/contentassets/bf0e5e31bbab467eaf02040c7b17513a/180-vattenfall-substation-info-sheet.pdf</a> Issues relating to access off the A47 is also discussed in the SoCG with Highways England.





Topic/ Issue	Relevant Representation Number	Applicant Response
Disruption near Necton/onshore project substation	Rep 29, Rep 35, Rep 57, Rep 61, Rep 77, Rep 88, Rep 93, Rep 170, Rep 95, Rep 102, Rep 105, Rep 188, Rep 200, Rep 242	Issues related to traffic have been considered in part or in full in the following submission documents:  • ES Chapter 24 Traffic and Transport (DCO document 6.1) • Outline Traffic Management Plan (DCO document 8.8) • Chapter 17 of the Consultation Report — • Chapter 23 of the Consultation Report — Responses received under Section 47 of the 2008 Act • Appendix 4.2 of the Consultation Report — FAQ Documents • Appendix 3.3 of the Consultation Report — Hearing Your Views III (Interim consultation report) • Appendix 13.9 of the Consultation Report — Landowner Information Pack (Version 1 — June 2017) • Appendix 14.8 of the Consultation Report — Necton Substation Workshop Presentations • Appendix 25.13 of the Consultation Report — Landowner Information Pack (Version 2 — April 2018) • Appendix 22.1 of the Consultation Report — Section 42 Responses and regard had by the Applicant
Disruption along the onshore cable route	Rep 74, Rep 164, Rep 178, Rep 202	<ul> <li>Issues related to traffic have been considered in part or in full in the following submission documents:         <ul> <li>ES Chapter 24 Traffic and Transport (DCO document 6.1)</li> <li>Outline Traffic Management Plan (DCO document 8.8)</li> <li>Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project</li> <li>Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act</li> <li>Appendix 4.2 of the Consultation Report – FAQ Documents</li> <li>Appendix 3.3 of the Consultation Report – Hearing Your Views III (Interim consultation report)</li> </ul> </li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
		<ul> <li>Appendix 13.19 of the Consultation Report – Landowner Information Pack (Version 1 – June 2017)</li> <li>Appendix 25.13 of the Consultation Report – Landowner Information Pack (Version 2 – April 2018)</li> <li>Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant</li> </ul>
DCO wording to ensure traffic mitigation and local stakeholder engagement is adequately secured	Rep 123	Concerns regarding DCO requirements are addressed in the SoCG with Norfolk County Council.
Cumulative traffic impacts with Hornsea Project Three at Oulton and Cawston	Rep 175; Rep 123, Rep 98	Concerns regarding cumulative traffic impacts with Hornsea Project Three are addressed in the SoCG with the following stakeholders:  Broadland District Council; Norfolk County Council; Oulton Parish Council; and Orsted (parent company of Hornsea Project Three).





#### **1.20** Noise

Table 20 Applicant responses to Relevant Representations in relation to Noise

Topic/ Issue	Relevant Representation Number	Applicant Response
Construction noise	Rep 7, Rep 15, Rep 16, Rep 17, Rep 25, Rep 38, Rep 41, Rep 43, Rep 45, Rep 48, Rep 52, Rep 59, Rep 61, Rep 64, Rep 65, Rep 66, Rep 75, Rep 76, Rep 77, Rep 88, Rep 89, Rep 95, Rep 99, Rep 104, Rep 105, Rep 114, Rep 116, Rep 122, Rep 124, Rep 128, Rep 130, Rep 132, Rep 134, Rep 138, Rep 143, Rep 145, Rep 170, Rep 179, Rep 188, Rep 198, Rep 208, Rep 217, Rep 218, Rep 226, Rep 229, Rep 232, Rep 234, Rep 242, Rep 254	<ul> <li>Issues related to construction noise have been considered in part or in full in the following submission documents:         <ul> <li>ES Chapter 25 Noise and Vibration (DCO document 6.1)</li> <li>The Outline CoCP which includes a commitment to produce a Construction Noise Management Plan prior to construction as required under Requirement 20(2)(e) of the DCO.</li> <li>Chapter 14 of the Consultation Report – Phase IIb – Additional Non-Statutory Consultation - Workshops</li> <li>Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project</li> <li>Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act</li> <li>Appendix 4.2 of the Consultation Report – FAQ Documents</li> <li>Appendix 3.3 of the Consultation Report – Hearing Your Views III (Interim consultation report)</li> <li>Appendix 4.2 of the Consultation Report – FAQ Documents</li> <li>Appendix 12.8 of the Consultation Report – Phase II Non-Statutory Consultation materials</li> <li>Appendix 13.19 of the Consultation Report – Landowner Information Pack (Version 1 – June 2017)</li> <li>Appendix 22.1 of the Consultation Summary Document – Section 42 Responses and regard had by the Applicant</li> <li>Appendix 25.13 of the Consultation Report – Landowner Information pack (Version 2 – April 2018)</li> </ul> </li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
Substation operational impacts	Rep 4, Rep 15, Rep 18, Rep 25, Rep 28, Rep 43, Rep 45, Rep 52, Rep 59, Rep 77, Rep 88, Rep 89, Rep 90, Rep 91, Rep 105, Rep 114, Rep 115, Rep 116, Rep 122, Rep127, Rep 128, Rep 134, Rep 145, Rep 155, Rep 159, Rep 170, Rep 179, Rep 188, Rep 198, Rep 217, Rep 218, Rep 226, Rep 231, Rep 234, Rep 238, Rep 253, Rep 256, Rep 259, Rep 134	The development will comply with the request of Breckland Council which requires that operational substation noise does not exceed 35 dB LAeq (5minutes) at any time at a free field location immediately adjacent to any noise sensitive location. A further limit of 32 dB Leq (15minutes) also applies to the 100Hz third octave band. Detailed noise assessments have shown that with proven noise reduction technology or procurement of low noise emitting equipment, this requirement can be readily achieved and no impacts will occur. Issues related to substation operational noise have been considered in part or in full in the following submission documents:  • ES Chapter 25 Noise and Vibration (DCO document 6.1) • Chapter 14 of the Consultation Report – Phase IIb – Additional Non-Statutory Consultation - Workshops • Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project • Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act • Appendix 4.2 of the Consultation Report – FAQ Documents • Appendix 3.3 of the Consultation Report – Hearing Your Views III (Interim consultation report) • Appendix 4.2 of the Consultation Report – Phase II Non-Statutory Consultation materials • Appendix 13.19 of the Consultation Report – Landowner Information Pack (Version 1 – June 2017) • Appendix 20.9 of the Consultation Report – Consultation Summary Document • Appendix 22.1 of the Consultation Summary Document – Section 42 Responses and regard had by the Applicant.





## 1.21 Air Quality

Table 21 Applicant responses to Relevant Representations in relation to Air Quality

Topic/ Issue	Relevant Representation Number	Applicant Response
Dust during construction	Rep 15, Rep 16, Rep 17, Rep 38, Rep 49, Rep 64, Rep 65, Rep 66, Rep 104, Rep 116, Rep 132, Rep 159, Rep 166, Rep 242	The construction works will be conducted in line with the CoCP (Requirement 20 of the DCO), an outline of which has been included in the Norfolk Vanguard DCO application (DCO document 8.1). This code sets out the management measures that all contractors will be required to adopt and implement such as environmental management, health and safety and construction principles, including relevant best practice method statements and necessary mitigation measures. This will include measures to reduce and manage dust production as a result of construction work.
		Issues related to dust have been considered in part or in full in the following submission documents:
		<ul> <li>ES Chapter 26 Air Quality (DCO document 6.1)</li> <li>Outline CoCP (DCO document 8.1)</li> <li>Appendix 22.1 of the Consultation Summary Document – Section 42 Responses and regard had by the Applicant.</li> </ul>
Pollution from construction	Rep 16, Rep 17, Rep 59, Rep 124, Rep127, Rep 196, Rep 208	Issues related to air pollution have been considered in part or in full in the following submission documents:
vehicles (diesel/emissions)		ES Chapter 26 Air Quality (DCO document 6.1)
Impacts of air quality on designated sites	Rep 106	The assessment of Air Quality effects follows the Design Manual for Roads and Bridges (DMRB) Guidance (2007) for identifying the potential effects of nitrogen deposition from road traffic. The conclusion of the assessment is that the deposition levels are negligible.
qualifying features e.g. Felbrigg Wood SSSI		Further detail is provided in ES Chapter 26 Air Quality (DCO document 6.1).





### 1.22 Human Health

Table 22 Applicant responses to Relevant Representations in relation to Human Health

Topic/ Issue	Relevant Representation Number	Applicant Response
Electromagnetic Fields/Radiation	Rep 10, Rep 17, Rep 28, Rep 44, Rep 47, Rep 66, Rep 71, Rep 79, Rep 82, Rep 85, Rep 114, Rep 116, Rep 128, Rep 130, Rep 144, Rep 155, Rep 177, Rep 188, Rep 217, Rep 242	The Applicant has considered the potential impacts of Electro-Magnetic Fields (EMF) as a result of proposed project transmission infrastructure and at the point of connection to the National Grid. The decision to use HVDC technology to transmit power from the wind farm site to the national grid eliminates many potential impacts associated with EMF radiation. 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. A Converter Station is proposed to convert DC to AC power so that it can connect to the National Grid. The DC Converter station requires some specialised equipment which could potentially exceed the exposure limits if located close to the perimeter fence. This will be considered in the detailed design to ensure that the design fully complies with the public exposure limits. In relation to the HVAC cables connecting the onshore project substation (converter hall) to the National Grid substation, Vattenfall's policy is only to design and install equipment that is compliant with the relevant exposure limits. To ensure this, all of the equipment for Norfolk Vanguard, capable of producing EMFs, has been assessed in accordance with the provisions of the Government's Code of Practice on Compliance.
		<ul> <li>Issues related to EMF have been considered in part or in full in the following submission documents:</li> <li>ES Chapter 27 Human Health (DCO document 6.1)</li> <li>Information sheet produced by Vattenfall and Orsted relating to EMF, published on the project website:         <ul> <li><a href="https://corporate.vattenfall.co.uk/contentassets/bf0e5e31bbab467eaf02040c7b17513a/vattenfall-orsted-emf-information-sheet.pdf">https://corporate.vattenfall.co.uk/contentassets/bf0e5e31bbab467eaf02040c7b17513a/vattenfall-orsted-emf-information-sheet.pdf</a></li> </ul> </li> <li>Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and Influence on the Project</li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
		Appendix 4.2 of the Consultation Report – FAQ Documents
Health impacts due to stress/impact of project on way of life	Rep 16, Rep 22, Rep 44, Rep 45, Rep 47, Rep 49, Rep 52, Rep 71, Rep 77, Rep 78, Rep 85, Rep127, Rep 128, Rep 139, Rep 148, Rep 166, Rep 196, Rep 208, Rep 217, Rep 218, Rep 229, Rep 242, Rep 255,	Issues related to Human Health have been considered in part or in full in the following submission documents:  • ES Chapter 27 Human Health (DCO document 6.1)  • Chapter 17 of the Consultation Report- Overview of Non-Statutory Consultation and influence on the Project

# 1.23 Onshore Archaeology

Table 23 Applicant responses to Relevant Representations in relation to Onshore Archaeology

Topic/ Issue	Relevant Representation Number	Applicant Response
Written Scheme of Investigation (WSI) (onshore) – specific wording of commitments	Rep 123	Concerns regarding the WSI wording are addressed in the SoCG with Norfolk County Council.
Impact on onshore archaeology at the onshore project substation	Rep 122, Rep 133, Rep 134, Rep 198, Rep 253, Rep 256	Issues related to archaeology at the onshore project substation site have been considered in part or in full in the following submission documents:  • ES Chapter 28 Onshore Archaeology and Cultural Heritage (DCO document 6.1)  • The Outline WSI (onshore) (DCO document 8.5)  • Chapter 13 of the Consultation Report – Phase II Non-Statutory Consultation Report (Refining the Project)  • Chapter 17 of the Consultation Report- Overview of Non-Statutory Consultation and influence on the Project





Topic/ Issue	Relevant Representation Number	Applicant Response	
		Appendix 3.3 of the Consultation Report- Hearing Your Views III (interim consultation report)	
Impact on archaeology at landfall	Rep 10, Rep 124, Rep 208, Rep 226, Rep 229, Rep 249	<ul> <li>Issues related to archaeology at landfall have been considered in part or in full in the following submission documents:         <ul> <li>ES Chapter 17 Offshore Archaeology and Cultural Heritage (DCO document 6.1)</li> <li>ES Chapter 28 Onshore Archaeology and Cultural Heritage (DCO document 6.1)</li> <li>The Outline WSI (onshore) (DCO document 8.5)</li> <li>The Outline WSI (offshore) (DCO document 8.6)</li> <li>Chapter 13 of the Consultation Report – Phase II Non-Statutory Consultation Report (Refining the Project)</li> <li>Chapter 17 of the Consultation Report- Overview of Non-Statutory Consultation and influence on the Project</li> <li>Appendix 3.3 of the Consultation Report- Hearing Your Views III (interim consultation report)</li> </ul> </li> </ul>	
Impact on the Blickling Estate	Rep 202	A complete archaeological assessment of the land associated with the development has been undertaken, as outlined in ES Chapter 28 Onshore Archaeology and Cultural Heritage (DCO document 6.1).  The Outline WSI (onshore) (DCO document 8.5) states: "a comprehensive programme of post-consent archaeological survey work (in-line with proportionate and appropriate approaches to be adopted elsewhere across the onshore project area) is also anticipated to take place across the relevant parts of the wider National Trust Blickling Estate, associated with the onshore project area and onshore works, in consultation with the Trust and NCC HES [Norfolk County Council Historic Environment Service], due to the subsurface archaeological interests potentially associated with this landscape."	





Topic/ Issue	Relevant Representation Number	Applicant Response
Listed building concerns – proximity of construction	Rep 134	Assessment of the risk to the listed properties can be found in ES Chapter 28 Onshore Archaeology and Cultural Heritage (DCO document 6.1). Table 28.22 sets out that there will be no intervisibility between the Building [Bradenham Hall] and the onshore project substation, located approx. 1.9 km to the west / north-west. The Building is well screened by intervening woodland blocks on its west side and further afield by Great Wood, and other vegetation, trees and hedgerows.'
Archaeological surveys	Rep 134	Archaeological assessments undertaken are outlined in ES Chapter 28 Onshore Archaeology and Cultural Heritage (DCO document 6.1).

# 1.24 Landscape and Visual

Table 24 Applicant responses to Relevant Representations in relation to Landscape and Visual

Topic/ Issue	Relevant Representation Number	Applicant Response
Support for minimising visual impacts at the substation and use of existing screening as mitigation	Rep 123	Noted.
Mitigation (and visual impact of the onshore project substation site)	Rep 3, Rep 4, Rep 7, Rep 11, Rep 15, Rep 16, Rep 20, Rep 22, Rep 25, Rep 26, Rep 27, Rep 28, Rep 29, Rep 30, Rep 31, Rep 35, Rep 36, Rep 37, Rep 38, Rep 39, Rep 40, Rep 41, Rep 42, Rep 43, Rep 49, Rep 52, Rep 53, Rep 54, Rep 55, Rep 56, Rep 57, Rep 58, Rep 61, Rep 64, Rep 65, Rep 66, Rep	The Applicant will work to ensure that mitigation proposed is proportional to the scale of the substation infrastructure, and that it mitigates the overall impact on the local area. The key mitigation in relation to landscape and visual impacts of the onshore project substation is its location; the proposed project substation footprint makes effective use of topographic undulations and natural screening. This includes:  • Additional mitigation planting to enhance the screening effect of existing hedgerows and woodland blocks in the local area. The location of this planting and





Topic/ Issue	Relevant Representation Number	Applicant Response
	75, Rep 84, Rep 85, Rep 88, Rep 89, Rep 90, Rep 91, Rep 92, Rep 95, Rep 96, Rep 99, Rep 102, Rep 104, Rep 105, Rep 114, Rep 115, Rep 116, Rep 119, Rep 120, Rep 122, Rep 125, Rep 126, Rep127, Rep 128, Rep 130, Rep 132, Rep 134, Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 154, Rep 155, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 170, Rep 171, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 188, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 198, Rep 201, Rep 203, Rep 204, Rep 205, Rep	<ul> <li>photomontages/visualisations are provided in Chapter 29.2 of the Environmental Statement.</li> <li>Bunds, or earth mounds, will be constructed where possible to increase the base height and maximise the effectiveness of mitigation planting as screening.</li> <li>Mitigation planting will comprise faster growing 'nurse' species and slower growing 'core' species. Core species with an average growth rate of 250mm per annum will provide 5m to 7m of growth after 20 years which will characterise the woodland structure over the long term. Nurse species would be faster growing (350mm per annum) to provide 7m to 8m of screening after 20 years.</li> <li>Where advanced planting can be achieved (in areas not affected by the construction works), this would commence in 2020 (based on the indicative programme outlined in ES Chapter 5 Project Description (DCO document 6.1.5)) which will provide a minimum 3 years of growth prior to commencement of operation which equates to approximately 1.2m of additional growth.</li> </ul>
	207, Rep 209, Rep 210, Rep 211, Rep 212, Rep 213, Rep 214, Rep 213, Rep 214, Rep 218, Rep 214, Rep 216, Rep 227, Rep 229, Rep 220, Rep 221, Rep 227, Rep 230, Rep 233, Rep 231, Rep 234, Rep 235, Rep 236, Rep 237, Rep 239, Rep 240, Rep 241, Rep 242, Rep 244, Rep 246, Rep 248, Rep 249, Rep 250, Rep 251, Rep 252, Rep 253, Rep 256, Rep 257, Rep 259, Rep 260, Rep 262, Rep 263, Rep 264, Rep 265, Rep 267	This information was also made available pre-examination in the information sheet — Onshore project Substation, accessible via the project website: <a href="https://corporate.vattenfall.co.uk/contentassets/bf0e5e31bbab467eaf02040c7b17513a/180-vattenfall-substation-info-sheet.pdf">https://corporate.vattenfall.co.uk/contentassets/bf0e5e31bbab467eaf02040c7b17513a/180-vattenfall-substation-info-sheet.pdf</a> Issues related to visual impact and mitigation have been considered in part or in full in the following submission documents:  • ES Chapter 29 Landscape and Visual Impact Assessment • Chapter 17 of the Consultation Report — Overview of Non-Statutory Consultation and influence on the Project • Chapter 23 of the Consultation Report — Summary of responses Received under Section 47 of the 2008 Act • Appendix 4.2 of the Consultation Report — FAQ Documents • Appendix 12.7 of the Consultation Report - Phase I Non-Statutory Exhibition Materials





Topic/ Issue	Relevant Representation Number	Applicant Response
		<ul> <li>Appendix 12.8 of the Consultation Report – Phase II Non-Statutory Exhibition Materials</li> <li>Appendix 14.1 of the Consultation Report – June 2017 Newsletter</li> <li>Appendix 14.8 of the Consultation Report – Necton Substation Workshop Presentations</li> <li>Appendix 20.10 of the Consultation Report - Formal Consultation Public Exhibition Boards</li> <li>Appendix 20.14 of the Consultation Report – February 2018 Newsletter</li> <li>Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant</li> </ul>
Mitigation (and visual impact at landfall)	Rep 76, Rep 138, Rep 166	The Applicant will work to ensure that mitigation proposed is proportional to the scale of the infrastructure required at landfall, and that it mitigates the overall impact on the local area.  Issues related to visual impact and mitigation have been considered in part or in full in the following submission documents:  • ES Chapter 29 Landscape and Visual Impact Assessment
Visual impacts during construction at the England Coast Path and confirmation regarding potential closures of the path.	Rep 106	Effects during construction are short-term (20 weeks), reversible and limited to a very short section of the England Coast Path. In addition, the landfall compound will be set back at least 125m from the coast (with the search area for the landfall compound extending a further 200m inland). Attempts to screen the works (fencing) would either close off views along the coastal path and create a greater impact (if fencing placed along the path) or would be relatively redundant (if located next to the works 200m from the coastal path).
		This is discussed in ES Chapter 29 Landscape and Visual Impact Assessment and Chapter 30 Tourism and Recreation.  Further information over Public Rights of Way (PRoW) closures can be found in the Outline CoCP (DCO document 8.1)) and Public Rights of Way Strategy (DCO document 8.4).





Topic/ Issue	Relevant Representation Number	Applicant Response
Lighting	Rep 7, Rep 17, Rep 18, Rep 25, Rep 38, Rep 41, Rep 43, Rep 45, Rep 52, Rep 59, Rep 61, Rep 64, Rep 65, Rep 66, Rep 77, Rep 88, Rep 95, Rep 104, Rep 105, Rep127, Rep 128, Rep 132, Rep 134, Rep 138, Rep 143, Rep 145, Rep 159, Rep 169, Rep 170, Rep 179, Rep 198, Rep 207, Rep 209, Rep 210, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 219, Rep 220, Rep 223, Rep 224, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 217, Rep 219, Rep 220, Rep 229, Rep 223, Rep 224, Rep 225, Rep 227, Rep 239, Rep 232, Rep 235, Rep 237, Rep 239, Rep 240, Rep 249, Rep 257, Rep 134	The Outline CoCP (document 8.1) includes commitment to produce an Artificial Light Emissions Management Plan prior to construction as required under Requirement 20(2)(c) of the DCO.  Issues related to lighting have been considered in part or in full in the following submission documents:  • ES Chapter 29 Landscape and Visual Impact Assessment • Appendix 3.1 – Hearing Your Views I (interim consultation report) Plus also see Hearing Your Views I Summary Report https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/norfolk-vanguard-october-2016-drop-in-summary-report.pdf) • Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant  There will not be any permanent operational lighting at the onshore project substation.
Information on the size of the converter substation building, as well as appearance and external cladding	Rep 134, Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	This information is available in the following DCO application documents:  • Design and Access Statement, section 6.3, doc ref 8.3, also • ES Chapter 4 Site Selection and Assessment of Alternatives • ES Chapter 29 Landscape and Visual Impact Assessment





## 1.25 Socio-economics, Tourism & Recreation

#### Table 25 Applicant responses to Relevant Representations in relation to Socio-economics, Tourism & Recreation

Topic/ Issue	Relevant Representation Number	Applicant Response
PRoW and Trails	Rep 123	Concerns regarding PRoW approvals are addressed in the SoCG with Norfolk County Council
Disruption to local residents and businesses (not location specific)	Rep 2, Rep 79, Rep 122, Rep 123, Rep 143, Rep 178, Rep 205, Rep 206	<ul> <li>Issues related to disruption to local residents and businesses have been considered in part or in full in the following submission documents:         <ul> <li>ES Chapter 30 Tourism and Recreation</li> <li>ES Chapter 31 Socio-Economics</li> <li>Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project</li> <li>Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act</li> <li>Appendix 22.1 of the Consultation Report – Section 42 responses and regard had by the applicant</li> </ul> </li> </ul>
Disruption to local residents and businesses (near Onshore Project Substation)	Rep 1, Rep 3, Rep 11, Rep 16, Rep 18, Rep 20, Rep 26, Rep 28, Rep 29, Rep 30, Rep 31, Rep 32, Rep 35, Rep 36, Rep 39, Rep 41, Rep 43, Rep 44, Rep 47, Rep 53, Rep 59, Rep 70, Rep 83, Rep 84, Rep 85, Rep 87, Rep 97, Rep 102, Rep 104, Rep 111, Rep 114, Rep 119, Rep 122, Rep 127, Rep 218, Rep 130, Rep 132, Rep 144, Rep 145, Rep 170, Rep 188, Rep 209, Rep 210, Rep 211, Rep 212, Rep 213, Rep 214, Rep 216, Rep 217, Rep 218, Rep 219, Rep 220, Rep 223, Rep 224,	<ul> <li>Issues related to disruption to local residents and businesses near Necton have been considered in part or in full in the following submission documents:         <ul> <li>ES Chapter 30 Tourism and Recreation</li> <li>ES Chapter 31 Socio-Economics</li> <li>Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project</li> <li>Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act</li> <li>Appendix 22.1 of the Consultation Report – Section 42 responses and regard had by the applicant</li> </ul> </li> </ul>





Topic/ Issue	Relevant Representation Number	Applicant Response
	Rep 231, Rep 235, Rep 237, Rep 239, Rep 240, Rep 249, Rep 253, Rep 257, Rep 259, Rep 260, Rep 263, Rep 264, Rep 267	
Disruption to local residents and businesses (near Landfall)	Rep 10, Rep 48, Rep 76, Rep 78, Rep 103, Rep 110, Rep 112, Rep 124, Rep 124, Rep 124, Rep 137, Rep 138, Rep 169, Rep 196, Rep 208, Rep 229, Rep 245, Rep 249, Rep 254, Rep 255	As a result of the decision to use a long HDD at the landfall, there will be a much reduced impact on Happisburgh, with no closure of the beach.  Issues related to disruption to local residents and businesses near Landfall have been considered in part or in full in the following submission documents:  • ES Chapter 30 Tourism and Recreation • ES Chapter 31 Socio-Economics • Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project • Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act • Appendix 3.3. of the Consultation Report – Hearing Your Views III (interim consultation report). • Appendix 22.1 of the Consultation Report – Section 42 responses and regard had by the applicant
Mitigation for impact of dust, noise and disturbance on residential properties and into open agricultural land	Rep 177, Rep 200	Issues related to dust, noise and disturbance on local residents have been considered in part or in full in the following submission documents:  • ES Chapter 25 Noise and Vibration • ES Chapter 26 Air Quality • ES Chapter 27 Human Health • ES Chapter 30 Tourism and Recreation • ES Chapter 31 Socio-Economics





Topic/ Issue	Relevant Representation Number	Applicant Response
Support regarding the use of Great Yarmouth port facilities for construction and operation	Rep 123	Agreements regarding port facilities are addressed in the SoCG with Norfolk County Council
Concerns regarding property devaluation	Rep 15, Rep 16, Rep 17, Rep 22, Rep 32, Rep 38, Rep 42, Rep 49, Rep 50, Rep 52, Rep 54, Rep 64, Rep 66, Rep 70, Rep 77, Rep 78, Rep 87, Rep 88, Rep 95, Rep 96, Rep 102, Rep 105, Rep 111, Rep 128, Rep 130, Rep 155, Rep 207, Rep 226, Rep 244, Rep 255, Rep 139; Rep 140; Rep 200	All claims in relation to reduction in value to property will be assessed in line with the Compensation Code. A useful set of Government guidance booklets set out the basics of the Code <a href="https://www.gov.uk/government/collections/">https://www.gov.uk/government/collections/</a> compulsory-purchase-system-guidance. Dialogue in relation to focused community benefit associated with permanent above ground onshore infrastructure will be undertaken independently of and without prejudice to the concurrent DCO process. Discussion on this process has already begun with Breckland Council and landowners.
Job creation	Rep 57, Rep 70, Rep 114, Rep 253	Job creation have been considered in part or in full in the following submission documents:  • ES Chapter 31 Socio-Economics • Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project • Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act • Appendix 12.4 of the Consultation Report – October 2016 Newsletter • Appendix 12.7 of the Consultation Report – Phase I Non-Statutory Public Exhibition materials • Appendix 12.8 of the Consultation Report – Phase II Non-Statutory Public Exhibition materials • Appendix 13.2 of the Consultation Report – March 2017 Newsletter • Appendix 14.1 of the Consultation Report – June 2017 Newsletter • Appendix 20.9 of the Consultation Report – Consultation Summary Document • Appendix 20.10 of the Consultation Report – Formal Consultation Public Exhibition Boards





Topic/ Issue	Relevant Representation Number	Applicant Response
		Appendix 20.14 of the Consultation Report – February 2018 Newsletter

### 1.26 DML and DCO

### Table 26 Applicant responses to Relevant Representations in relation to DML and DCO

Topic/ Issue	Relevant Representation Number	Applicant Response
DML and DCO details	Rep 106, Rep 186	The MMO and Natural England relevant representations include comments on the draft DCO which the Applicant is currently considering in discussion with the MMO and Natural England. The draft DCO will be updated and revised as appropriate, and submitted for the appropriate deadlines in the Examination process.
Request to be named stakeholder for CoCP sign off for each stage of works	Rep 117	The Environment Agency will be named in the updated DCO as a consultee for the relevant local planning authority to consult with prior to signing off the CoCP (Requirement 20 of the DCO).
Protective provisions	Rep 167	Protective provisions are addressed in the SoCG with:  • NGET.





## 1.27 Renewable Energy

Table 27 Applicant responses to Relevant Representations in relation to Renewable Energy

Topic/ Issue	Relevant Representation Number	Applicant Response
Requests to feed into local electricity transmission networks	Rep 123	Concerns regarding local electricity networks are addressed in the SoCG with Norfolk County Council

### 1.28 Consultation and Requests for Additional Information

Table 28 Applicant responses to Relevant Representations in relation to Consultation and Requests for Additional Information

Topic/ Issue	Relevant Representation Number	Applicant Response
Consultation process	Rep 1, Rep 4, Rep 8, Rep 10, Rep 11, Rep 18, Rep 20, Rep 21, Rep 22, Rep 25, Rep 26, Rep 27, Rep 29, Rep 30, Rep 35, Rep 36, Rep 42, Rep 43, Rep 46, Rep 45, Rep 56, Rep 58, Rep 82, Rep 88Rep 1, Rep 4, Rep 8, Rep 10, Rep 11, Rep 18, Rep 20, Rep 21, Rep 22, Rep 25, Rep 26, Rep 27, Rep 29, Rep 30, Rep 35, Rep 36, Rep 42, Rep 43, Rep 46, Rep 45, Rep 56, Rep 58, Rep 82, Rep 88, Rep 89, Rep 91, Rep 95, Rep 100, Rep 105, Rep 111, Rep 114, Rep 122, Rep 128, Rep 134, Rep 154, Rep 159, Rep 188, Rep 198, Rep 206, Rep 209, Rep 210, Rep 211, Rep 212, Rep 214, Rep 216, Rep 217, Rep 219, Rep 220, Rep 221, Rep 223, Rep 224, Rep 232, Rep 234, Rep 235, Rep 237, Rep 239, Rep 240, Rep	Since 2016, the Applicant has followed a programme of extensive pre-application consultation with local communities and statutory and non-statutory consultees. This was recorded in the Norfolk Vanguard Consultation Report (document 5.1) which has been submitted as part of the application. The Applicant has responded to comments related to the adequacy of consultation and the consultation process in the Consultation Report (see for example Section 23.4 'Summary of responses received during the statutory consultation period', and Appendix 22.1 - Section 42 Responses)  Issues related to the consultation process have been considered in part or in full in the following submission documents:  • Chapter 1 of the Consultation Report – Executive Summary • Chapter 4 of the Consultation Report – Regulatory Context • Chapter 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project • Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act





Topic/ Issue	Relevant Representation Number	Applicant Response
	256, Rep 257, Rep 259, Rep 261, Rep 263, Rep 264, Rep 267	<ul> <li>Appendix 3.2 of the Consultation Report – Hearing Your Views II (interim consultation report). Plus, also see Hearing Your Views II Summary Report https://corporate.vattenfall.co.uk/globalassets/uk/projects/norfolk-vanguard/summary-report.pdf</li> <li>Appendix 3.3 of the Consultation Report – Hearing Your Views III (interim consultation report)</li> <li>Appendix 4.2 of the Consultation Report – FAQ Documents</li> <li>Appendix 12.4 of the Consultation Report – October 2016 Newsletter</li> <li>Appendix 12.7 of the Consultation Report – Phase I Non-Statutory Public Exhibition materials</li> <li>Appendix 12.8 of the Consultation Report – Phase II Non-Statutory Public Exhibition materials</li> <li>Appendix 13.2 of the Consultation Report – March 2017 Newsletter</li> <li>Appendix 14.1 of the Consultation Report – June 2017 Newsletter</li> <li>Appendix 14.8 of the Consultation Report – Necton Substation Workshop Presentation</li> <li>Appendix 14.4 of the Consultation Report – Cable Relay Station Workshop Presentation</li> <li>Appendix 20.9 of the Consultation Report – Consultation Summary Document</li> <li>Appendix 20.10 of the Consultation Report – Formal Consultation Public Exhibition Boards</li> <li>Appendix 20.14 of the Consultation Report – February 2018 Newsletter</li> <li>Appendix 22.1 of the Consultation Report – Section 42 responses and regard had by the Applicant</li> </ul>
Summary of engagement and addressing of feedback	Rep 186	The SoCG with the MMO provides a summary of the engagement on matters out with the specific topic chapters e.g. consultation on the DCO. A detailed response to the MMO's relevant representation is include in Appendix 1 of the SoCG.





Topic/ Issue	Relevant Representation Number	Applicant Response
Landowner comments regarding ongoing negotiations	Rep 134, Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193Rep 134, Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205, Rep 206, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	Consultation with landowners is ongoing and Heads of Terms (HoTs) are being agreed where possible. At the date of writing, over 70% of affected landowners have signed HoTs with the applicant.
Transboundary consultation – no further comments	Rep 268, Rep 269	Noted.  These issues are addressed in ES Chapter 13 Offshore Ornithology and ES Chapter 33 Offshore Cumulative and Transboundary Assessment.





#### 1.29 Miscellaneous

**Table 29 Applicant responses to Relevant Representations in relation to Miscellaneous comments** 

Topic/ Issue	Relevant Representation Number	Applicant Response
Mitigation of effects on designated sites (SACs, SPAs and the Norfolk Coast Area of Outstanding Natural Beauty)	Rep 269	Effects on designated sites and appropriate mitigation are considered in part or in full in the following application documents:  • ES Chapter 8 Marine Geology, Oceanography and Physical Processes • ES Chapter 10 Benthic and Intertidal Ecology • ES Chapter 12 Marine Mammals • ES Chapter 13 Offshore Ornithology • ES Chapter 22 Onshore Ecology • ES Chapter 23 Onshore Ornithology • ES Chapter 29 Landscape and Visual Impact Assessment • Information to Support HRA report (document 5.3)
Compensation/Community benefit	Rep 4, Rep 9, Rep 24, Rep 39, Rep 57, Rep 62, Rep 62, Rep 69, Rep 70, Rep 92, Rep 92, Rep 96, Rep 96, Rep 101, Rep 105, Rep 105, Rep 170, Rep 184, Rep 184, Rep 232, Rep 249, Rep 249, Rep 253, , Rep 4, Rep 9, Rep 39, Rep 57, Rep 62, Rep 62, Rep 69, Rep 70, Rep 92, Rep 92, Rep 96, Rep 96, Rep 101, Rep 105, Rep 105, Rep 170, Rep 184, Rep 184, Rep 232, Rep 249, Rep 249, Rep 253	Wider community benefits associated with the Project include opportunities for the local population across Norfolk in areas such as jobs, skills and employment. From January 2017, extensive work has been undertaken by the Applicant to understand and contribute, where appropriate, to existing skills, training and education initiatives. The Applicant is working with education skills providers in the area (including the local authorities, NALEP, EEEGR) to develop an appropriate skills strategy, which will facilitate direct employment in the offshore wind industry and in its supply chain. From Spring 2018, the Applicant has engaged with the potential local supply chain. In September 2018, the Applicant held a successful stakeholder event which brought together stakeholders from the local authorities, business support organisations and skills providers to discuss how Vattenfall could promote the local supply chain capitalising on the opportunities that Offshore Wind will present in the East Anglia NALEP area. Work is ongoing to support the local supply chain to maximise the benefits that offshore wind will bring to the area.





Topic/ Issue	Relevant Representation Number	Applicant Response
		Specific landowner compensation amounts will be addressed as part of the commercial agreements that the Applicant will negotiate with landowners. All claims in relation to reduction in value to property will be assessed in line with the Compensation Code. A useful set of Government guidance booklets set out the basics of the Code <a href="https://www.gov.uk/government/collections/compulsory-purchase-system-guidance">https://www.gov.uk/government/collections/compulsory-purchase-system-guidance</a> . It should be noted, that dialogue in relation to focused community benefit associated with permanent above ground onshore infrastructure will be undertaken independently of and without prejudice to the concurrent DCO process.
Funding requirements for the project	Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	Details on funding are provided in the Funding Statement (DCO document 4.2).
Cumulative impact of substations placed at Necton	Rep 4, Rep 7, Rep 9, Rep 21, Rep 29, Rep 40, Rep 50, Rep 54, Rep 64, Rep 83, Rep 84, Rep 88, Rep 95, Rep 102, Rep 105,	Where relevant, the application outlines how the Applicant and National Grid agreed on an appropriate connection point for the Project, adhering to National Grid's statutory duty to ensure a coordinated, efficient and economic solution to the maintenance and





Topic/ Issue	Relevant Representation Number	Applicant Response
	Rep 109, Rep 122, Rep 126, Rep 130, Rep 131, Rep 134, Rep 143, Rep 144, Rep 159, Rep 170, Rep 215, Rep 217, Rep 262	operation of the national grid network, as it develops and responds to the UK's changing supply and demand profile. ES Chapter 4 Site Selection and Assessment of Alternatives provides a description of the process to identify suitable locations for the Project infrastructure including the Onshore Substation site and alternatives considered.
		Issues related to cumulative impacts have been considered in part or in full in the following submission documents:
		<ul> <li>ES Chapter 33 Onshore Cumulative Impacts (DCO document 6.1).</li> <li>Chapter 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act</li> <li>Appendix 14.4 of the Consultation Report – Cable Relay Station Workshop Presentation</li> <li>Appendix 14.8 of the Consultation Report – Necton Substation Workshop Presentation</li> <li>Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant</li> </ul>
		In addition, a report on the Strategic Approach to Selecting a Grid Connection Point for Norfolk Vanguard and Norfolk Boreas (DCO document 'Pre-ExA; OCP Report; 9.2', submitted to the Planning Inspectorate on 23 October 2018) provides a summary of the context and work carried out by National Grid and Vattenfall Wind Power Limited (parent company of the Applicant) to select an appropriate location to connect to the National Electricity Transmission System.
Cumulative Impact of Norfolk Vanguard, Norfolk Boreas and Hornsea Project Three.	Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep 158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195Rep 146, Rep 147, Rep 149, Rep 150, Rep 151, Rep 152, Rep 153, Rep 157, Rep	ES Chapters 19 to 31 provide an assessment of relevant cumulative impacts. A summary is provided in ES Chapter 33 Onshore Cumulative Impacts (DCO document 6.1).





Topic/ Issue	Relevant Representation Number	Applicant Response
	158, Rep 161, Rep 162, Rep 163, Rep 165, Rep 173, Rep 176, Rep 177, Rep 181, Rep 182, Rep 185, Rep 189, Rep 190, Rep 191, Rep 193, Rep 195, Rep 201, Rep 203, Rep 204, Rep 205, Rep 225, Rep 227, Rep 230, Rep 233, Rep 236, Rep 241, Rep 246, Rep 248, Rep 250, Rep 251, Rep 252, Rep 265, Rep 266	
Terrorist attack/malfunction/damage caused by wildfire – Onshore Project Substation	Rep 31, Rep 32, Rep 75, Rep 77, Rep 91, Rep 105, Rep 114, Rep 116, Rep 128, Rep 198, Rep 231, Rep 253, Rep 256, Rep 259	Major accidents and disasters are considered in ES Chapter 5 Project Description (DCO document 6.1). To mitigate the effects of any incident that may lead to a fire at the substation, the highest appropriate levels of fire protection and resilience will be specified for the onshore project substation. The energy sector has some of the highest health and safety requirements and these standards will be incorporated into the substation design.  This is also addressed in the Necton Parish Council SoCG.
Decommissioning	Rep 45, Rep 73, Rep 232	In accordance with Requirement 29 of the DCO, a Decommissioning Plan must be agreed with the relevant planning authority
Viability of wind power as an energy source	Rep 14, Rep 111, Rep 228	ES Chapter 2 Need for the Project (DCO document 6.1) outlines the benefits of offshore wind as an energy source.
General support for the scheme as proposed	Rep 62, Rep 94, Rep 101	Noted. The Applicant is grateful for the support of the local community.





Topic/ Issue	Relevant Representation Number	Applicant Response
Offshore construction safety	Rep 156	The final selection of the port facilities required to construct and operate the project has not yet been determined, however local options include Hull, Great Yarmouth or Lowestoft.  Offshore safety is addressed in the SoCG with the MCA.
Agreement for Lease	Rep 12	Noted. The Applicant is in regular dialogue with The Crown Estate.
No comments	Rep 80, Rep 142	Noted.  ES Chapter 19 Ground Conditions (DCO document 6.1) considers ground conditions and contamination.  ES Chapter 27 Human Health (DCO document 6.1) considers potential health effects.



# **APPENDIX 1 RELEVANT REPRESENTATION NUMBERS**

Rep no.	Interested Party
1	Andrew Johnson
2	Barbara Penn
3	lan Harding
4	Jenny Smedley
5	John Sings
6	Little Dunham Parish Council
7	Jenny Smedley on behalf of Margaret Woodall
8	Mr John Reid
9	Mr N Warnes
10	Patrice Baldwin
11	Jenny Smedley on behalf of Stuart Higgs
12	The Crown Estate
13	Whale and Dolphin Conservation
14	Norma Albinson
15	Tony Smedley on behalf of Lorraine Gill
16	Jenny Smedley on behalf of Alan Wright
17	Jenny Smedley on behalf of Heidi Wright
18	Jenny Smedley on behalf of Maurice Woodall
19	Royal Yachting Association
20	Andrew Brown
21	Jenny Smedley on behalf of Angela Campbell
22	Brenda Dutton
23	CPRE Norfolk
24	East of England Energy Group (EEEGR)
25	Edna Violet Greening
26	Emily Ruggles-Brown
27	Julian Pearson
28	Linda Smith
29	Jenny Smedley on behalf of Roy Campbell
30	Sharon Ruggles-Brown

Rep no.	Interested Party
31	Simon Nunn
32	Tracey Nunn
33	Alan Knight
34	Deb Pender
35	Gabrielle Joyce
36	Jenny Smedley on behalf of Jakki Harper- Lewis
37	Jenny Smedley on behalf of Lesley Rose
38	Tony Smedley on behalf of Lucy Mayes
39	Paul Young
40	Jenny Smedley on behalf of Phil Harper- Lewis
41	Jenny Smedley on behalf of Sheila Barlow
42	Jenny Smedley on behalf of William Barlow
43	E. A. R. Spain
44	Laura Philpott
45	Edna Violet Greening on behalf of Mr Greening
46	Mrs L. Knightley
47	Richard Philpott
48	Sarah Greenwood
49	Andrew Matthews
50	Mrs Samantha Hagan
51	National Federation of Fishermen's Organisations
52	Nina Matthews
53	Samantha Neville
54	Clive Pellett
55	Tracy
56	Fraser Bateman
57	Mrs Bass
58	David Matthews
59	Frederick Albert Thompson



Rep		
no.	Interested Party	
60	The Corporation of Trinity House of Deptford Strond	
61	Katherine Jones	
62	Mrs Julie Keay	
63	Witton and Ridlington Parish Council	
64	Tony Smedley on behalf of Richard Gill	
65	Tony Smedley on behalf of Tom Gill	
66	Christine Howard	
67	East Ruston Parish Council	
68	Scottish Power Renewables	
69	Better broadband for East Ruston (BB4ER)	
70	John Clarke	
71	Lorraine Clarke	
72	Cadent Gas Limited	
73	Glenn Berry	
74	James Bellingall	
75	Jeff Shalloo	
76	Mrs G Watson	
77	Mrs S Shalloo	
78	No to Relay Stations (N2RS)	
79	Ray Pearce	
80	The Coal Authority	
81	Holme Hale Parish Council	
82	Kerry Murray	
83	A C H Pearson	
84	Dr A E Daniels	
85	Jeanette Webb	
86	Norfolk Coast Partnership	
87	Barbara Champion	
88	Alison Cracknell	
89	Bernard Smee	
90	Edward Sharples	
91	Mrs Susan Smee	
92	Amanda Bullen	

Rep	
no.	Interested Party
93	Ashley Christian
94	Kevin Miller
95	Graham Cracknell
96	Allan Stanley
97	Ann Lumsden-Bedingfeld
98	Cawston Parish Council
99	I.B. Sharples
100	Denise Ann Axham
101	Diana Daniels
102	Robert Sutton
103	Tracey Collett
104	Tony Smedley on behalf of Westbrooke Holidays
105	Leda N Hayton
106	Natural England
107	Bryan Oldman
108	Jan Burley
109	Pauline Carter
110	Mrs Paula Woodings
111	Andrew Lockwood
112	Debbie Dunne
113	Necton Parish Council
114	Patricia Lockwood
115	S Bernard
116	Scott Sidey
117	Environment Agency
118	North Walsham Town Council
119	Adriana Marks
120	Margaret King
121	Richard William Woods
122	Colin King
123	Norfolk County Council
124	Penelope Malby
125	Stephen King



Rep no.	Interested Party
126	Victoria Spain
127	Derek Pinner
128	Diana Lockwood
129	Happisburgh Parish Council on behalf of Happisburgh Parish Council
130	Mr Paul King
131	Mrs Margaret Moore
132	Tony Smedley
133	Ann Seaman
134	Chris Alllhusen
135	Donna Blackburn
136	Halena Higgs
137	Karen Basten
138	Leith Marar
139	Brown & Co LLP. on behalf of Mr and Mrs G Kerry
140	Brown and Co on behalf of Necton Farms Ltd
141	Oulton Parish Council on behalf of Oulton Parish Council c/o Mr L Mills, Clerk to the council
142	Public Health England
143	Richard Barr
144	Roberta Spain
145	Stefan Flexen
146	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of A W Ditch and Son
147	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Albanwise
148	Brown & Co LLP. on behalf of Angloflora Farms Ltd.
149	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Bradenham Hall Farms
150	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Church Farm (Gimingham) Ltd
151	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Diocese of Norwich

Rep no.	Interested Party
152	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of G F de Feyter and Partners
153	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of G T Cubitt
154	George Freeman MP
155	Geraldine Allen
156	Health and Safety Executive
157	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of J Grier
158	Savills (UK)Ltd (Savills (UK)Ltd) on behalf of Mes A Green
159	Miss Phoenix
160	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Mr and Mrs J Leeder
161	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Mr P Bunting
162	Brown & Co on behalf of Mr Peter Edwards
163	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Mrs A Jones
164	Savills on behalf of Mrs C B Hart
165	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Mrs P Carrick
166	Mrs Valerie Morris
167	National Grid Electricity Transmission PLC and National Grid Gas PLC
168	Norfolk Wildlife Trust
169	Peter Soldan
170	Rupert Lovegrove
171	Sheila Rowe
172	The Wildlife Trusts
173	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Trustees of Stinton Hall Trust being Sir David Chapman, Grant Picher, Micheal Dewing and William Edwards
174	Breckland Council
175	Broadland District Council
176	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of C Siely



Pon	Journal Toler
Rep no.	Interested Party
177	Bidwells on behalf of Christopher S Wright
178	Cllr. Graham Everett
179	Dennis Jackman
180	Eastern Inshore Fisheries and Conservation Authority
181	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of G Hales and Mrs P Riches
182	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of HBSH Pension Scheme
183	Historic England
184	John Gills
185	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of L Padulli
186	Marine Management Organisation
187	Maritime and Coastguard Agency
188	Miss Sherrie Nobbs
189	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Mr and Mrs M Jones
190	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Mrs P Hinton
191	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of National Trust
192	Addleshaw Goddard LLP on behalf of Network Rail Infrastructure Limited
193	NFU
194	Orsted Wind Power A/S
195	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of P Mutimer
196	Pat Bailey
197	Royal Society for the Protection of Birds (RSPB) (Royal Society for the Protection of Birds (RSPB))
198	Sarah Rodgers
199	Bidwells on behalf of Sir Edward Evans- Lombe
200	Brown and Co on behalf of Stephen Peter Evan Garrett and Penelope Anne Yvonne Garrett

Rep no.	Interested Party
201	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of T Love
202	The National Trust
203	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Trustees of Salle Park Trust being Sir David Chapman, Grant Pilcher, Michael Dewing and William Edwards
204	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of William Youngs
205	Alan Gibson
206	Corbett Farming Company
207	David Vear
208	Helen Standley
209	James Sheringham
210	Julianne
211	Kate Sheringham
212	Lucy Sheringham
213	Lynn Sheringham
214	Margaret Meen
215	Mrs Vanessa Long
216	Paul Haddow
217	R Jackson
218	Robert Craigan
219	Suzanne Meen
220	William Meen
221	Lucy Sheringham on behalf of Andrew Rogers
222	Anglian Water Services Ltd
223	Lucy Sheringham on behalf of Anna Spratt
224	Lucy Sheringham on behalf of Annabelle Rogers
225	Brown & Co on behalf of Bawdeswell Farms Ltd
226	Brian Bales
227	Brown & Co on behalf of Charity of Thomas Barrett - The Trustees thereof care of Nicholas Saffell



Rep	society together
no.	Interested Party
228	Christine Dye
229	Christopher Dye
230	Brown & Co on behalf of David Hampson
231	David Spain
232	Diane Flynn
233	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Dillington Hall Estate
234	Dr Andy Scarlett
235	Ed Salmon
236	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Farnham Farms Limited
237	Lucy Sheringham on behalf of Fiona Unick- Wagg
238	Frank Cherry
239	Gary Holley
240	Georgie Armstrong
241	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Gorgate Ltd
242	Jackie Sidey
243	John Darcy
244	Kirsty Willis
245	Louise Brooks
246	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Lucy Keane and Matthew Keane
247	Mark Kiddle-Morris
248	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Mark, Dorothy, Marilyn and David Howell
249	Michael Birmingham
250	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Mills & Reeve Trust Corporation and Alexander Gavin Angell Lane

Rep no.	Interested Party
251	Savills (UK) Ltd (Savills (UK) Ltd) on behalf of Mr Rex Baldwin
252	Brown & Co on behalf of Mr Robert Claboon
253	Mrs C L Cherry
254	Mrs H Birmingham
255	Mrs Susan Allen
256	Neville McBrien
257	Lucy Sheringham on behalf of Nick Rice
258	North Norfolk District Council
259	Phil Hayton
260	Lucy Sheringham on behalf of Ros Wright
261	Susannah Spain
262	Sydney McNeil
263	Lucy Sheringham on behalf of Thomas Bart
264	Lucy Sheringham on behalf of Tony Wright
265	Brown & Co on behalf of Trustees of the Bawdeswell Settlement being David Gurney, David Brown, Kate Paul, William Barr
266	Brown & Co on behalf of Trustees of the Gurloque Settlement
267	Wendy McNeil
268	Ministry of Environment and Food of Denmark
269	Norwegian Environment Agency
270	Le Prefet du Nord
271	Rijkswaterstaat Zee en Delta
N/A	Environment Agency (updated version of Rep 117)