



**SCOTTISHPOWER
RENEWABLES**

East Anglia ONE North Offshore Windfarm

Appendix 22.1

Onshore Ecology Consultation Responses

Environmental Statement Volume 3

Applicant: East Anglia ONE North Limited
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Table of Contents

22.1	Onshore Ecology Consultation Responses	1
22.1	Introduction	1

Appendix 22.1 is supported by the tables listed below.

Table Number	Title
Table A22.1	Consultation Responses

Glossary of Acronyms

AONB	Area of Outstanding Natural Beauty
BAP	Biodiversity Action Plan
BCT	Bat Conservation Trust
CIA	Cumulative Impact Assessment
CWS	County Wildlife Site
DCO	Development Consent Order
Defra	Department for Environment, Food and Rural Affairs
EclA	Ecological impact Assessment
EIA	Environmental Impact Assessment
ES	Environmental Statement
ETG	Expert Topic Group
ha	Hectares
HDD	Horizontal Directional Drilling
ILE	Institute of Lighting Engineers
JNCC	Joint Nature Conservation Committee
m	Metres
NERC Act	Natural Environment and Rural Communities Act
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
OS	Ordnance Survey
PEIR	Preliminary Environmental Information Report
PID	Public Information Day
SAC	Special Area of Conservation
SPA	Special Protection Area
SPR	ScottishPower Renewables
SSSI	Site of Special Scientific Interest
UKHPI	UK Habitat of Principal Importance

Glossary of Terminology

Applicant	East Anglia ONE North Limited.
Cable sealing end compound	A compound which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Cable sealing end (with circuit breaker) compound	A compound (which includes a circuit breaker) which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Construction consolidation sites	Compounds associated with the onshore works which may include elements such as hard standings, lay down and storage areas for construction materials and equipment, areas for vehicular parking, welfare facilities, wheel washing facilities, workshop facilities and temporary fencing or other means of enclosure.
Development area	The area comprising the onshore development area and the offshore development area (described as the 'order limits' within the Development Consent Order).
East Anglia ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia ONE North windfarm site	The offshore area within which wind turbines and offshore platforms will be located.
European site	Sites designated for nature conservation under the Habitats Directive and Birds Directive, as defined in regulation 8 of the Conservation of Habitats and Species Regulations 2017 and regulation 18 of the Conservation of Offshore Marine Habitats and Species Regulations 2017. These include candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas.
Horizontal directional drilling (HDD)	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
HDD temporary working area	Temporary compounds which will contain laydown, storage and work areas for HDD drilling works.
Jointing bay	Underground structures constructed at intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.
Landfall	The area (from Mean Low Water Springs) where the offshore export cables would make contact with land, and connect to the onshore cables.
Link boxes	Underground chambers within the onshore cable route housing electrical earthing links.
Mitigation areas	Areas captured within the onshore Development Area specifically for mitigating expected or anticipated impacts.

National electricity grid	The high voltage electricity transmission network in England and Wales owned and maintained by National Grid Electricity Transmission
National Grid infrastructure	A National Grid substation, cable sealing end compounds, cable sealing end (with circuit breaker) compound, underground cabling and National Grid overhead line realignment works to facilitate connection to the national electricity grid, all of which will be consented as part of the proposed East Anglia ONE North project Development Consent Order but will be National Grid owned assets.
National Grid overhead line realignment works	Works required to upgrade the existing electricity pylons and overhead lines (including cable sealing end compounds and cable sealing end (with circuit breaker) compound) to transport electricity from the National Grid substation to the national electricity grid.
National Grid overhead line realignment works area	The proposed area for National Grid overhead line realignment works.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia ONE North project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia ONE North project Development Consent Order.
National Grid substation location	The proposed location of the National Grid substation.
Natura 2000 site	A site forming part of the network of sites made up of Special Areas of Conservation and Special Protection Areas designated respectively under the Habitats Directive and Birds Directive.
Onshore cable corridor	The corridor within which the onshore cable route will be located.
Onshore cable route	This is the construction swathe within the onshore cable corridor which would contain onshore cables as well as temporary ground required for construction which includes cable trenches, haul road and spoil storage areas.
Onshore cables	The cables which would bring electricity from landfall to the onshore substation. The onshore cable is comprised of up to six power cables (which may be laid directly within a trench, or laid in cable ducts or protective covers), up to two fibre optic cables and up to two distributed temperature sensing cables.
Onshore development area	The area in which the landfall, onshore cable corridor, onshore substation, landscaping and ecological mitigation areas, temporary construction facilities (such as access roads and construction consolidation sites), and the National Grid Infrastructure will be located.
Onshore infrastructure	The combined name for all of the onshore infrastructure associated with the proposed East Anglia ONE North project from landfall to the connection to the national electricity grid.
Onshore preparation works	Activities to be undertaken prior to formal commencement of onshore construction such as pre-planting of landscaping works, archaeological investigations, environmental and engineering surveys, diversion and laying of services, and highway alterations.

Onshore substation	The East Anglia ONE North substation and all of the electrical equipment within the onshore substation and connecting to the National Grid infrastructure.
Onshore substation location	The proposed location of the onshore substation for the proposed East Anglia ONE North project.
Transition bay	Underground structures at the landfall that house the joints between the offshore export cables and the onshore cables.

22.1 Onshore Ecology Consultation Responses

22.1 Introduction

1. This appendix to **Chapter 22 Onshore Ecology** covers those statutory consultation responses that have been received as a response to the Scoping Report (2017), the Preliminary Environmental Information Report (PEIR) (2018) and Expert Topic Group (ETG) Meetings.
2. Responses from stakeholders and regard given by the Applicant have been captured in **Table A22.1**.
3. As Section 42 consultation for the proposed East Anglia ONE North project was conducted in parallel with the proposed East Anglia TWO project, where appropriate, stakeholder comments which were specific to East Anglia TWO, but may be of relevance East Anglia ONE North, have also been included in the consultation responses for East Anglia ONE North.

Table A22.1 Consultation Responses Related to Chapter 22 Onshore Ecology

Consultee	Date/ Document	Comment	Response / where addressed in the ES
<p>The following comments were received prior to consultation on the PEIR and were in response to the Scoping Report or direct consultation with stakeholders. These comments were taken into account in the production of the PEIR.</p>			
Natural England	08/1/2017 Scoping Response	The England Biodiversity Strategy published by Defra establishes principles for the consideration of biodiversity and the effects of climate change. The ES should reflect these principles and identify how the development's effects on the natural environment will be influenced by climate change, and how ecological networks will be maintained. The National Planning Policy Framework (NPPF) requires that the planning system should contribute to the enhancement of the natural environment 'by establishing coherent ecological networks that are more resilient to current and future pressures' (NPPF Para 109), which should be demonstrated through the ES.	Noted and considered throughout this Environmental Statement (ES) chapter. Section 22.5.4 of this chapter details the anticipated baseline trends.
Natural England	08/12/2017 Scoping Response	Natural England notes that as of 30th November 2017 the Conservation of Habitats and Species Regulations 2010 and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 were both consolidated and should now be referred to as; The Conservation of Habitats and Species Regulations 2017 (or 'the Habitats Regulations 2017') and The Conservation of Offshore Marine Habitats and Species Regulations 2017 (or 'the Offshore Habitats Regulations 2017'). The 2017 Regulations do not introduce any material changes to the regulations or change how they should be interpreted and applied but where reference to specific regulations are made the numbering may have changed.	Comments are noted and references made to The Conservation of Habitats and Species Regulations 2017 (or 'the Habitats Regulations 2017') where appropriate.
Natural England	08/12/2017 Scoping Response	Natural England agrees with the designated sites listed. However, the PEI will need to consider any impacts upon local wildlife and geological sites. Local Sites are identified by the local wildlife trust, geo-conservation group or a local forum established for the purposes of identifying and selecting local sites. They are of county importance for wildlife or geodiversity. The PEI should therefore include an assessment of the likely	Designated sites and local wildlife sites are discussed in section 22.4.1 of this chapter and potential impacts on designated sites are discussed in section 22.5.1 of this chapter.

Consultee	Date/ Document	Comment	Response / where addressed in the ES
		impacts on the wildlife and geodiversity interests of such sites. The assessment should include proposals for mitigation of any impacts and if appropriate, compensation measures.	Sites designated for geological features are discussed in Chapter 18 Ground Conditions and Contamination
Natural England	08/12/2017 Scoping Response	The area likely to be affected by the proposal should be thoroughly surveyed by competent ecologists at appropriate times of year for relevant species and the survey results, impact assessments and appropriate accompanying mitigation strategies included as part of the PEI.	Details of the ecological surveys, a clear definition of each survey study area, field surveyors, and their findings from the baseline field surveys are discussed in section 22.3.7 of this chapter.
Natural England	08/12/2017 Scoping Response	Natural England advises that the potential impact of the proposal upon features of nature conservation interest and opportunities for habitat creation/enhancement should be included within this assessment in accordance with appropriate guidance on such matters.	<p>Potential impacts on the baseline environment area discussed in section 20.4.4 of this chapter.</p> <p>In December 2018, Defra consulted on plans to introduce the principle of Net gain to the Planning System in England. A Defra's recent response to consultation¹ affirms their intention to bring forward legislation to mandate Net Gain within the Environment Bill but confirms their position that Nationally Significant Infrastructure Projects (NSIPs) and marine developments will remain out of scope of the mandatory requirement in the Environment Bill.</p> <p>ScottishPower Renewables (SPR) will continue to work constructively with Defra and key stakeholders such as Natural England to support the preparation of guidance on the application of Net Gain and in their work to establish potential approaches to achieving biodiversity net gains for NSIPs and marine developments.</p>

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/819823/net-gain-consult-sum-resp.pdf

Consultee	Date/ Document	Comment	Response / where addressed in the ES
Suffolk Wildlife Trust	19/12/2017 Scoping Response	In relation to the proposed surveying periods given in the Scoping Report, we consider that the period proposed for dormouse surveys is too short for a presence/absence survey. The surveys should be undertaken from May to November following the guidance in the Dormouse Conservation Handbook (2nd edn.) Bright, P., Morris, P. and Mitchell-Jones, T. (2006). The Dormouse Conservation Handbook (2nd edn). English Nature.	All ecological field surveys have been undertaken in accordance with industry accepted guidance and within their optimal surveying windows. Where limitations have been encountered, these have been acknowledged, and are discussed in section 22.3.6.1 of this chapter.
Suffolk Wildlife Trust	19/12/2017 Scoping Response	With regard to bats (both activity surveys and emergence/re-entry surveys outlined in the Scoping Report), the survey periods should follow the published best practice guidance. Dependent on habitat type and quality there is likely to be the need to extend the identified survey periods further into late summer (July/August) and into the autumn (September/October). It should be ensured that survey effort follows the published good practice guidance to ensure that adequate data is collected to ensure that a robust assessment can be made. Collins, J. (ed.). (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.	The suite of bat activity and emergence/re-entry surveys have been undertaken in accordance with industry accepted guidance. Details of these surveys are provided in section 22.4.3.3 of this chapter.
Environment Agency	08/12/2017 Scoping Response	There should be – from the outset – an aspiration to go beyond “no-net-loss” in terms of terrestrial biodiversity features, and aim for ecological enhancements as part of the broader development. For example, the Thorpeness Hundred River offers numerous opportunities to develop ecological projects that could enhance local biodiversity and improve river quality.	Embedded mitigation measures are presented in section 22.3.3 of this chapter and further mitigation measures, where required, are presented in section 22.3.7.5 of this chapter. SPR will continue to work constructively with Defra and key stakeholders such as Natural England to support the preparation of guidance on the application of Net Gain and in their work to establish potential approaches to achieving biodiversity net gains for NSIPs and marine developments.

Consultee	Date/ Document	Comment	Response / where addressed in the ES
Norfolk County Council	01/11/2017 Scoping Response	The need to consider cumulative impact is a requirement of the EIA process. This is of particular importance when considering ecological impacts. Projects to be incorporated in such an assessment must include those in the past, present and foreseeable future. Projects to be incorporated in such an assessment must include not only other potential wind farms but also other types of project taking place in the marine environment or onshore so that all elements of the infrastructure are assessed.	Section 22.3.8 of this chapter presents the Cumulative Impact Assessment (CIA)
The Planning Inspectorate	20/12/2017 Scoping Response	The Scoping Report applies a variety of distances within which species and designated sites are identified, such as, for example, 3km from the onshore study area for designated sites and 2km for protected species. No explanation is provided of how these distances were selected. The study areas used for the assessment must be clearly explained and justified and sufficiently broad to capture all ecological receptors which could be significantly affected by the Proposed Development.	Table 22.2 of this chapter presents the impact study areas that have been used for different receptors. These are in accordance with industry accepted guidance and/or professional judgement and were agreed with stakeholders at the Onshore Ecology and Ornithology ETG meetings held to date.
The Planning Inspectorate	20/12/2017 Scoping Response	Within the Scoping Report, the designated sites are described as listed in Table 3.10 and reflected in Figure 3.6. However, Figure 3.6 does not show three of the sites listed in the table: the Minsmere to Walberswick Ramsar, Special Protection Area (SPA) and Special Area Conservation (SAC); the Minsmere to Walberswick Heath and Marshes Site of Special Scientific Interest (SSSI); or the Gromford Meadow SSSI. Table 3.10 does not include the Alde- Ore & Butley Estuaries SAC (shown on Figure 3.6) and incorrectly identifies the Alde-Ore Estuary SPA and SSSI as a SAC.	Designated sites are discussed in section 22.4.1 of this chapter and shown on Figure 22.1 and Figure 22.2 .
The Planning Inspectorate	20/12/2017 Scoping Response	The Scoping Report does not set out how sensitive receptors will be identified; this should be made clear in the PEI and agreed with the relevant statutory bodies.	Section 22.4.3 of this chapter presents the findings from the baseline ecological surveys and desk study review. Methodologies for onshore ecological receptors have been discussed and agreed

Consultee	Date/ Document	Comment	Response / where addressed in the ES
			<p>with stakeholders at the Onshore Ecology and Ornithology ETG meetings held to date. Section 22.4 of this chapter provides the details of the methodologies used to inform the ES.</p> <p>Section 22.6 of this chapter presents the impacts on sensitive receptors.</p>
The Planning Inspectorate	20/12/2017 Scoping Response	The PEI should ensure that, in addition to protected species and designated habitats, potential effects on non-protected species and non-designated habits which may be affected by the Proposed Development are also assessed.	Section 22.4.3 of this chapter provides information in relation to all ecological receptors (designated or otherwise) that have been considered within this ES.
The following comments were made in response to the PEIR and were taken into account in the production of this ES			
Suffolk Coast and Heath – AONB Partnership	25/03/2019 Section 42 Consultation Response	The AONB Partnership have concern about the impact on the nationally designated AONB during the construction phase of the installation of the cables. The proposals have the potential to negatively impact Sites of Special Scientific Interest, Special Protection Area, hedgerows and wildlife habitat.	Table 22.4 of this chapter provides mitigation measures embedded into the project design and considers designated sites. Designated sites are also presented in section 22.5 of this chapter. Site selection decisions have been made to avoid features of interest at designated sites. Table 22.12 of this chapter reviews designated sites within 2km of the onshore development area. Hedgerows are specifically addressed in section 22.6.1.5 and Table 22.19 of this chapter. Impacts and mitigation to other habitats are addressed in section 22.6 of this chapter.
Suffolk Coast and Heath – AONB Partnership	25/03/2019 Section 42 Consultation Response	Works should recognise the importance of biodiversity and wildlife habitats in the AONB and systems should take a precautionary principle to avoid negative impacts and where these cannot be avoided, they should be minimised, mitigated or compensated for.	Table 22.4 of this chapter provides mitigation measures embedded into the project design and considers designated sites. Where impacts cannot be fully avoided, additional mitigation is provided

Consultee	Date/ Document	Comment	Response / where addressed in the ES
			under each impact and subsequently the residual impact presented.
Environment Agency	26/03/2019 Section 42 Consultation Response	There are likely to be opportunities for habitat enhancement arising, in particular, from the reinstatement works following the installation of the cables. These, and all other, enhancement opportunities should be fully assessed. The proposal should aim to provide net gains for biodiversity in accordance with the government's 25 Year Environment Plan and the requirements of the National Planning Policy Framework.	Embedded mitigation is included in section 22.3.7 of this chapter. SPR will continue to work constructively with Defra and key stakeholders such as Natural England to support the preparation of guidance on the application of Net Gain and in their work to establish potential approaches to achieving biodiversity net gains for NSIPs and marine developments.
Environment Agency	26/03/2019 Section 42 Consultation Response	The indication of residual impacts on habitat and protected species look viable, but will be reliant on appropriate design level mitigation and enhancement measures to be specified and agreed.	Table 22.4 of this chapter provides mitigation measures embedded into the project design. Impacts to habitats and associated mitigation are addressed in section 22.5 of this chapter. It is noted that design level mitigation will need be specified and agreed with the relevant stakeholders post-consent through the production of an Ecological Management Plan (EMP), as secured under the requirements of the draft development consent order (DCO).
Natural England	26/03/2019 Section 42 Consultation Response	Any risk of a reduction in or loss of a terrestrial or marine European Site should be judged to be a 'likely significant effect', and the full significance of its impact on a site's integrity should be further tested by appropriate assessment.	Likely significant effects on European sites (SPA and Ramsar) are considered separately in the Information to Support the Appropriate Assessment Report (document reference 5.3).

Consultee	Date/ Document	Comment	Response / where addressed in the ES
			Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives , and section 22.5.1 of this chapter, and taken into consideration for assessing construction impacts.
Natural England	26/03/2019 Section 42 Consultation Response	Natural England recommends that in line with National Policy Statements there should be a clear ambition to provide net gain throughout the project development. There is currently no enhancement or net gain incorporated for habitats or species, we advise that the project should provide a legacy in line with the 25 Year Environment Plan.	Embedded mitigation is included in section 22.3.3 of this chapter. SPR will continue to work constructively with Defra and key stakeholders such as Natural England to support the preparation of guidance on the application of Net Gain and in their work to establish potential approaches to achieving biodiversity net gains for NSIPs and marine developments.
Natural England	26/03/2019 Section 42 Consultation Response	There is currently a lack of information regarding the likely impact and proposed mitigation measures, with certain key considerations such as the impact of noise and vibration and a construction timetable lacking, and therefore we cannot confidently concur with the current conclusions of no Likely Significant Effect. Greater detail will need to be provided in the ES.	Table 22.4 of this chapter provides mitigation measures embedded into the proposed East Anglia ONE North project design. Impacts to habitats and associated mitigation are addressed in section 22.6 of this chapter and additional mitigation measures proposed throughout this section as appropriate. Noise disturbance on protected species is covered in sections 25.6 and 25.7 of Chapter 25 Noise and Vibration . Chapter 6 Project Description details the programme of works.

Consultee	Date/ Document	Comment	Response / where addressed in the ES
			Further detail is provided in the Information to support Appropriate Assessment report (document reference: 5.3).
Natural England	26/03/2019 Section 42 Consultation Response	There is currently insufficient information provided as to the impact of the alternatives of open cut trenching through, or HDD under, the Sandlings SPA. We would expect further detail on the working corridor and direct habitat loss areas and disturbance areas within the ES.	Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives and section 22.5.1 of this chapter, and taken into consideration for assessing construction impacts. The implications of crossing techniques on sensitive ornithological receptors is detailed further in Chapter 23 Onshore Ornithology
Natural England	26/03/2019 Section 42 Consultation Response	There is currently insufficient information on alternative project design options for Natural England to provide substantive comments on adverse effect on integrity to Sandlings SPA. The methods for crossing the SPA should be confirmed and the timing of works in relation to features of interest outlined. Natural England would like to reiterate their preference for HDD under the Sandlings SPA, over open cut trenching, as outlined in response to the Scoping Report (2017).	Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives and section 22.5.1 of this chapter, and taken into consideration for assessing construction impacts. The implications of crossing techniques on sensitive ornithological receptors is detailed further in Chapter 23 Onshore Ornithology
Natural England	26/03/2019 Section 42 Consultation Response	There is currently insufficient information provided regarding areas of direct habitat loss, and indirect disturbance by noise, light and vibration to comment whether the mitigation proposed would be sufficient.	Section 22.6.2.2 of this chapter addresses disturbance to fauna from operational lighting and noise and proposed management measures.

Consultee	Date/ Document	Comment	Response / where addressed in the ES
			<p>Noise disturbances to protected species are addressed in sections 25.6 and 25.7 of Chapter 25 Noise and Vibration.</p> <p>Lighting impacts to protected species are addressed in sections 29.6 and 29.7 of Chapter 29 Landscape and Visual Impact.</p> <p>Section 22.6.1.2 of this chapter addresses the loss of arable habitat.</p> <p>Temporary loss of other habitats is noted within section 22.6 of this chapter.</p>
Natural England	26/03/2019 Section 42 Consultation Response	Any risk of a reduction in or loss of a terrestrial or marine European Site should be judged to be a 'likely significant effect', and the full significance of its impact on a site's integrity should be further tested by appropriate assessment.	<p>Likely significant effects on European sites (SPA and Ramsar) are considered separately in the Information to Support the Appropriate Assessment Report (document reference 5.3).</p> <p>Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives and section 22.5.1 of this chapter, and taken into consideration for assessing construction impacts.</p>
Natural England	26/03/2019 Section 42 Consultation Response	The Phase 1 and 2 2018 ecology surveys cover the indicative onshore development area and not the final East Anglia Two Development Area. Further studies should be conducted across the full red line boundary of the site.	A further survey was conducted in March 2019, as presented to the ETG group in May 2019. Results of this Phase 1 Addendum are provided as Annex 1 of the 2018 Extended Phase 1 Habitat Survey (Appendix 22.3).
Natural England	26/03/2019	Mitigation measures intended to avoid or reduce the harmful effects of a proposed project on a European site may no longer be taken into account by competent authorities at the Habitat	Likely significant effects on European sites (SPA and Ramsar) are considered separately in the Information to Support the

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
	Section 42 Consultation Response	Regulations Assessment (“HRA”) “screening stage” when judging whether a proposed plan or project is likely to have a significant effect on the integrity of a European designated site.	Appropriate Assessment Report (document reference 5.3). Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives and section 22.5.1 of this chapter, and taken into consideration for assessing construction impacts.
Natural England	26/03/2019 Section 42 Consultation Response	Natural England recommends that in line with National Policy Statements there should be a clear ambition to provide net gain throughout the project development. There is currently no enhancement or net gain incorporated for habitats or species, we advise that the project should provide a legacy in line with the 25 Year Environment Plan. National Policy Statement requires that developments show how SPR has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.’ Natural England recommends that the project aims moves away from no net loss and incorporates net gain at the earliest opportunity.	Embedded mitigation is included in section 22.3.3 of this chapter. SPR will continue to work constructively with Defra and key stakeholders such as Natural England to support the preparation of guidance on the application of Net Gain and in their work to establish potential approaches to achieving biodiversity net gains for NSIPs and marine developments.
Natural England	26/03/2019 Section 42 Consultation Response	There is no consideration of the impact of noise or vibration on the ecology of the area, in the ecology or noise and vibration chapters. This should be considered and included in the ES.	Section 22.6.2.2 of this chapter addresses disturbance to fauna from operational lighting and noise. Noise disturbances to protected species are addressed in sections 25.6 and 25.7 of Chapter 25 Noise and Vibration . Lighting impacts to protected species are addressed in sections 29.6 and 29.7 of Chapter 29 Landscape and Visual Impact .

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.3.4, Para. 17 Outline management plans submitted and mitigation should be of sufficient detail at the date of the DCO application to be able to confidently inform LSE on designated sites and species.	Noted. Likely significant effects on European sites (SPA and Ramsar) are considered separately in the Information to Support the Appropriate Assessment Report (document reference 5.3) which has been submitted with this DCO application. An Outline Landscape and Ecological Management Plan (OLEMS) (document reference: 8.7) has also been submitted with this application, as secured under the requirements of the draft DCO, which provides sufficient detail to proposed mitigation. This will be finalised post-consent in consultation with the relevant regulators.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.4.2.1, Para. 57 This should refer to Fig 22.1 not 22.4.	Noted and amended within text.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.4.3.3, Table 22.10 The magnitude of impact table defines 10-20 % habitat loss criteria as medium and less than 10 % as low. Any risk of a reduction in or loss of a terrestrial or marine European Site should be judged to be a 'likely significant effect', and the full significance of its impact on a site's integrity should be further tested by appropriate assessment. An appropriate assessment should examine the predicted loss in more detail, clearly identifying whether or not it would affect the habitats or supporting habitats of the European Site's qualifying features within that site.	Likely significant effects on European sites (SPA and Ramsar) are considered separately in the Information to Support the Appropriate Assessment Report (document reference 5.3) which has been submitted with this DCO application. Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives section 4.5.1 ,

Consultee	Date/ Document	Comment	Response / where addressed in the ES
			<p>and taken into consideration for assessing construction impacts.</p> <p>The implications of crossing techniques on sensitive ornithological receptors is detailed further in Chapter 23 Onshore Ornithology</p>
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.5.3.4 A commitment to conduct water vole and otter pre-construction surveys (within the optimal survey window) for both species to confirm that both species remain absent, i.e. no changes to the findings of the 2018 survey should be included in the ES.	Appendix 22.5 details the water vole and otter survey undertaken which concluded that these species were assumed absent. Prior to works commencing, a pre-construction survey (within the optimal survey window) for both species may be undertaken to confirm that both species remain absent, i.e. no changes to the findings of the 2018 survey.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.5.2, Para. 89 Within terrestrial habitats, consideration should be given to ancient trees and woodland, and woodland habitat of suitable quality but not formally designated as Ancient Woodland and their location illustrated.	Impacts to woodlands are presented in section 22.5.2 of this chapter.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Table 22.9 Advise that all nationally protected species, are considered of at least moderate importance. Currently badgers are considered (PEIR section 22.5.3.2) 'as a regularly occurring population of a nationally important species which is not threatened or rare in the country, badgers are considered to be of low importance.'	Badgers are not considered to be rare or threatened within the region therefore do not meet the criteria for 'moderate' as being threatened or rare in the region - Table 22.8 and section 22.5.3.2 of this chapter.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Table 22.13 The description of Minsmere to Walberswick SAC should include Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site; Perennial vegetation of stony banks.	Annex I habitats listed in Table 22.12 of this chapter. Perennial vegetation noted; addressed in text within Table 22.13 of this chapter.

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
Natural England	26/03/2019 Section 42 Consultation Response	PEI Table 22.13 Should include details of the features of interest of the SPA and Ramsar.	Features listed in Table 22.12 of this chapter.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Table 22.13 Features of Alde-Ore Estuary Ramsar, SPA, SSSI and Alde-Ore & Butley Estuaries SAC should be clearly identified.	Features listed in Table 22.12 of this chapter.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.5.2.1 The criteria of importance of land as set out in Table 22.9 should be revised, and be in accordance with NPPF.	Table 22.8 of this chapter is in accordance with NPPF.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.5, Para, 173 Hedgerow habitat is a UKHPI and Suffolk BAP habitat, advise that the hedgerow mitigation plan aims to re-establish all hedgerows to species rich in tact hedge, providing BAP habitat.	Section 22.6.1.5.2 of this chapter – hedgerows to be reinstated following the completion of works where possible. None of the hedgerows identified were assessed as important hedgerows in terms of ecological criteria (species rich and intact hedge). A hedgerow schedule has been submitted with this DCO application as part of the OLEMS, as secured under the requirements of the draft DCO.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.5.2.11, Para. 111 Consideration should be given to Leiston - Aldeburgh SSSI and coastal vegetated shingle in the case of a Bentonite or drilling mud outbreak. Information should be provided on engineering design, depth and break out contingencies.	Such impacts are scoped out as per section 22.6 of this chapter as agreed at the Onshore Ecology and Ornithology ETG meetings held to date and presented in the Scoping Report (SPR 2017). Landfall will be made using a long HDD and therefore, there will be no direct or indirect impacts on the

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
			intertidal zone and so impacts on coastal vegetated shingle are not considered further.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.5.3.2, Para. 115 Any works to badger setts will require a licence, and mitigation and compensation for the destructed setts should be clearly outlined.	Addressed in section 22.6.1.8 of this chapter.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.5.3.5, Para. 130 The 5 water bodies which could not be accessed for the 2018 Great Crested Newt survey should be surveyed pre construction and suitable mitigation incorporated in any CMP/ECMP.	Appendix 22.5 has been amended in line with refinements to the onshore development area and now reflects that 2 ponds were not able to be accessed during the 2018 Great Crested Newt survey, however these ponds do not fall within the boundary of the onshore development area. Therefore, no further surveys are required.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.5.3.6, Para. 136 No further reptile surveys will be undertaken as agreed in ETG. Natural England cannot find reference to this within the meeting minutes. We advise reptile surveys are undertaken in accordance with Natural England standing advice. https://www.gov.uk/guidance/reptiles-protection-surveys-and-licences	Chapter 5 EIA Methodology discusses the ETGs. Methodologies for onshore ecological receptors have been discussed and agreed with stakeholders at the Onshore Ecology and Ornithology ETG meetings held to date. Section 22.4 of this chapter provides the details of the methodologies used to inform the ES. Survey approach was presented in ETGs and no objections were raised. The Extended Phase 1 Habitat Survey (Appendix 22.3) identified small areas of suitable reptile habitat. There is also a commitment to pre-construction reptile surveys.

Consultee	Date/ Document	Comment	Response / where addressed in the ES
			Section 22.6 of this chapter presents the impacts on sensitive receptors.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.1.1, Para. 148 We welcome that the proposed EA2 project has committed to a long HDD at the landfall, which avoids any interaction with Leiston-Aldeburgh SSSI. However, consideration should be given in the ES to the possibility of Bentonite and drilling mud breakout and appropriate safeguards put in place.	Appropriate management of the possibility of Bentonite and drilling mud breakout will be detailed within the final CoCP, submitted post-consent to discharge a requirement of the draft DCO. This will be produced in consultation with the appropriate regulators.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.5.3.8 , Para. 139 Within the Leiston Aldeburgh SSSI the variety of water bodies and terrestrial habitats provides suitable breeding and hunting areas for many species of dragonfly and damselfly, including the nationally scarce hairy dragonfly <i>Brachytron pratense</i> . We are surprised therefore that no suitable habitat to support invertebrates was noted during the Extended Phase 1 Habitat Survey. We would advise this species which are included on the citation are considered within the ES.	No suitable habitat was noted during the Extended Phase 1 Habitat Survey for this species within the onshore development area. There will be no change to the Leiston Aldeburgh SSSI because the HDD construction method used at the landfall will avoid any construction footprint overlapping the SSSI.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.1.2, Para. 151 We note that SPR has considered open cut trenching of the cable route across the narrowest point of the Sandlings SPA and a working width of 16.1 m as a worst case scenario	Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives and section 22.6.1 of this chapter, and taken into consideration for assessing construction impacts. The implications of crossing techniques on sensitive ornithological receptors is detailed further in Chapter 23 Onshore Ornithology

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.6, Para 178 Potential impacts of alternative HDD and open cut trenching options, should be provided in case HDD is not possible.	Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives and section 22.5.1 of this chapter, and taken into consideration for assessing construction impacts. The implications of crossing techniques on sensitive ornithological receptors is detailed further in Chapter 23 Onshore Ornithology .
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.1.4, Para. 158 Impacts associated with onshore cable corridor. The mitigation referenced in section 22.6.1.1.4 refers only to bird species and does not extend to any other species.	The Minsmere to Walberswick Ramsar and SPA, and Alde-Ore Estuary Ramsar and SPA are designated for bird species, therefore the mitigation focusses on the impacts upon birds.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.2, Para. 160/161 Impacts to Arable Habitats. Natural England would expect to see reference to agricultural land classification and to see soil handling mitigation outlined within the ES. Any soil management or mitigation should be included in the ES.	This is referenced within Chapter 21 Land Use . See sections 22.3.3 and 22.5.1 of this chapter.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.4.2, Para. 171 <i>'Ensuring that at least an equivalent area of lost woodland is replanted following completion of the works (trees cannot be replanted directly above the buried cables)'</i> ; Natural England welcome the replanting of woodland and would encourage the developer to incorporate net gain into their strategy. The developer should provide information on the areas to be replanted and methodology of planting including timescales (in	Section 22.6.1.4 of this chapter details impact to woodland and highlights those areas within order limits that have been identified as being suitable tree planting. The area of woodland that will be lost will be very low and least an equivalent area of lost woodland will be replanted. The methodology and timescales of re-planting will be agreed post-consent with the relevant stakeholders.

Consultee	Date/ Document	Comment	Response / where addressed in the ES
		some cases mitigation planting could occur before woodland is removed) and species etc.	
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.5, Para. 176 We would expect mitigation measures to be further outlined within the ES in order to establish potential impacts. Possible mitigation could include but is not limited to: using locally relevant species, margins to encourage biodiversity, protection against browsing animals until the shrubs are established, replanting as soon as possible in the schedule, improvement of the hedgerows either side of the section to be removed including any gapping up, tree management and the development of scrub/rough grassland margins. Prior to removal of hedgerows a mitigation plan should be drawn up and agreed with Natural England.	The OLEMS (document reference 8.7) has been submitted with this application, as secured under the requirements of the draft DCO, which provides sufficient detail to proposed mitigation. This will be finalised post-consent in consultation with the relevant regulators.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.6, Para. 178 The impact on coastal habitat from bentonite and drilling mud break outs should be considered.	Appropriate management of the possibility of Bentonite and drilling mud breakout will be detailed within the final CoCP, submitted post-consent to discharge a requirement of the draft DCO. This will be produced in consultation with the appropriate regulators.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.7, Para. 178 Intend to trench cut the Hundred River which feeds into Sandlings SPA, we would expect to see an assessment of alternatives to include HDD under this water course and impacts outlined.	At the Hundred River, it is intended an open cut methodology is used to install cable ducts. Crossing methodology options are detailed in Chapter 6 Project Description . A trenchless technique may be used to cross the Hundred River but this does not include an HDD technique.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.7.1, Para. 183 Natural England recommends that mitigation to water courses include an aim to restore and improve habitat.	Section 22.5.1 of this chapter indicates that water course bed and bank habitats will be reinstated and where possible improved following the completion of the works

Consultee	Date/ Document	Comment	Response / where addressed in the ES
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.8, Para. 185 Noise, additional lighting and vibration may all disturb badgers a suitable protection buffer zone should be adopted as best practice, in line with Natural England's standing advice. There is currently no consideration of the impact of noise and vibration on badgers.	30m buffer zone is included mitigation in paragraph 188. Addressed in text in section 22.6.1.8 of this chapter.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.8, Para. 185 Developer states that arable and hedgerow habitat provide sub optimal foraging habitat for badgers. Natural England would like to see an indicative assessment of the badger foraging habitat in the area, setts that would likely be destroyed and habitat that would be created elsewhere in the territory by either habitat creation or enhancement.	Pre-construction surveys for badger will be undertaken – this is deemed sufficient as badger, by nature, frequently create new setts and abandon others. They will also forage in varying locations, therefore the rationale to survey pre-construction is valid in order to obtain the most accurate data. If setts cannot be avoided, then sett closure (under licence) would be undertaken and artificial setts created.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.8.4, Para. 187 Mitigation should include micro-siting of cable route to avoid badger setts, and mitigation and compensation as outlined within Natural England standing advice. The full proposed mitigation should be submitted as part of the DCO.	Paragraph 186 states that known setts will be avoided by the cable route. Pre-construction surveys will be undertaken to avoid damage to setts where possible.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.8.5, Para. 189 & 185 Currently insufficient information has been provided to conclude significance of impact to badgers.	In the county, the species is neither threatened nor rare, meaning that the species is a low value receptor. The impact upon this receptor, without mitigation is high due to the potential loss of setts, however setts will be avoided where possible by the onshore cable route, a 30m buffer will be placed around setts and precautionary working methods employed to ensure the impact will be of minor adverse significance – section 22.5.3 of this chapter. If setts cannot be avoided, then sett closure (under

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
			licence) would be undertaken and artificial setts created, ensuring the minor adverse significance.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.9 Potential impacts to bat habitat should be clearly mapped with roosting, foraging and commuting areas shown in relation to the redline boundary. In combination assessment with proposed development at Sizewell C and any other foreseeable plans or projects.	Figure 22.8 details the findings of a bat roost survey.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.11, Para. 205 States that no reptile surveys are required, as was agreed at the ETG in April. Natural England cannot find reference to this agreement in the meeting minutes. Nevertheless, Natural England advise that reptile surveys are completed to quantify potential impacts of the development on reptiles and to plan the mitigation works. The Phase 1 confirms reptiles use of the proposed development area. If suitable reptile habitat is available assume reptile presence. Reptile mitigation should ensure that there is no net loss of local reptile conservation status, by providing sufficient quality, quantity and connectivity of habitat to accommodate the reptile population in the long term, either on site or at an alternative site nearby. There is currently insufficient information provided to conclude level of effect.	This approach was presented in ETGs and no objections were raised. The Extended Phase 1 Habitat Survey identified small areas of suitable reptile habitat. There is also a commitment to pre-construction reptile surveys.
Natural England	26/03/2019 Section 42 Consultation Response	PEI Section 22.6.1.12, Para. 208 Further information needs to be provided within the ES on management of Himalayan balsam on Hundred River and preventing effects on designated sites.	Addressed in section 22.6.1.12 of this chapter. No areas of Himalayan Balsam were identified within the onshore development area during the relevant surveys (Appendix 22.3).
Natural England	26/03/2019	PEI Table 22.23 The in combination assessment with Sizewell C should be based on the most up to date project design available.	See Table 22.22 and section 22.7.2.1 of this chapter.

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
	Section 42 Consultation Response		
Suffolk County Council/Suffolk Coastal District Council	27/03/2019 Section 42 Consultation Response	The coast at the landfall site is a vulnerable habitat: Coastal Vegetated Shingle and, although it is proposed to HDD under this feature, full details of mitigation and monitoring potential damage and the consequent enhancement will be required.	No impact is anticipated on this habitat as detailed in section 22.5.2.11 of this chapter. At the landfall, HDD will be the sole method utilised.
Suffolk County Council/Suffolk Coastal District Council	27/03/2019 Section 42 Consultation Response	Hedgerows should surveyed according to the criteria set out in the 1997 Hedgerow Act Regulations in order that hedgerows that fulfil the 'important' criteria under the Act can be fully identified and options for avoidance can be considered as appropriate. This approach was an integral part of the East Anglia One (EA1) and East Anglia Three (EA3) cable corridor methodology.	A full survey was undertaken in accordance with criteria set out in the 1997 Hedgerow Act Regulations. A hedgerow schedule has been submitted with this DCO application as part of the OLEMS, as secured under the requirements of the draft DCO.
Suffolk County Council/Suffolk Coastal District Council	27/03/2019 Section 42 Consultation Response	The Councils remain unconvinced that the impacts on the Hundred River and the ecological corridor that it provides are clear. Similarly impacts upon woodland and other associated features which might be brought on by the long undergrounding process are still not clear. The Councils would wish to see how disturbance to existing ecological corridors and how the increased disturbance to historically "quiet" areas by any road or footpath diversions will be mitigated.	Section 22.6.1.7 of this chapter details the impacts upon the Hundred River and mitigation that will be implemented. Further information is detailed within Chapter 20 Water Resources and Flood Risk which includes impacts to hydrology, geomorphology and physical habitat. Footpath diversions are detailed within the Outline Public Rights of Way Strategy (OPRoWS) submitted with this application (document reference 8.4). The final Public Rights of Way Strategy will be developed post-consent, in order to discharge a requirement of the draft DCO, in consultation with the relevant regulators.

Consultee	Date/ Document	Comment	Response / where addressed in the ES
Suffolk County Council/Suffolk Coastal District Council	27/03/2019 Section 42 Consultation Response	There is little or no information on the impacts of construction compounds, parking areas, junction improvements, traffic movements and all of the associated infrastructure upon biodiversity.	<p>This is covered in Chapter 26 Traffic and Transport. Figure 26.4 provides a plot of sensitive features.</p> <p>A Traffic Management Plan (TMP) will be developed to ensure that construction work areas would be accessed using existing tracks and roads.</p> <p>Section 22.6.1.2 of this chapter details that the majority of the development area is arable land; impacts upon this land are therefore assessed.</p> <p>Section 22.6.1.4 of this chapter assesses the impacts of infrastructure to woodland and trees.</p> <p>Impacts upon specific species are assessed within section 22.5.3 of this chapter, including the use of an operational lighting scheme to reduce the impact upon bats.</p>
Suffolk County Council/Suffolk Coastal District Council	27/03/2019 Section 42 Consultation Response	The Councils are concerned that opening up a corridor such as the cable route, in-line with prevailing winds will turn the feature into a wind tunnel with negative impacts upon wildlife. The Councils would like to understand what investigations have been undertaken by SPR in to this potentially serious impact.	<p>Section 22.6.1.4.2 of this chapter details the replanting of trees, although trees will not be able to be replanted directly above the buried cables. This will minimise the 'wind tunnel' effect as the area of woodland will be replaced.</p> <p>The areas of woodland to be permanently removed will cover a small area, therefore minimising the potential for a "wind tunnel" effect.</p>
Suffolk County Council/Suffolk	27/03/2019	The Councils feel that there is a lack of real, proactive commitment to net gain for biodiversity even though this is a	Embedded mitigation is included in section 22.3.3 of this chapter.

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
Coastal District Council	Section 42 Consultation Response	requirement set out in NPS EN-1 (5.3.4). SPR are not currently proposing any meaningful enhancement projects.	SPR will continue to work constructively with Defra and key stakeholders such as Natural England to support the preparation of guidance on the application of Net Gain and in their work to establish potential approaches to achieving biodiversity net gains for NSIPs and marine developments.
Suffolk County Council/Suffolk Coastal District Council	27/03/2019 Section 42 Consultation Response	The Councils consider the PEIR down plays the harm or disturbance to biodiversity. The conclusions of the PEIR relies on mitigation strategies to be adopted and the Councils have not yet seen sufficient information on these. Amongst other things (such as impacts upon common birds), the Councils would like to understand what information is known and available in relation to the bats movements between and alongside the woods where the substations are proposed to be built.	Appendix 22.6 identifies that each monthly activity transect survey was designed in accordance with Bat Conservation Trust (BCT) guidelines (Collins 2016) and encompassed all the 58 features that had been recorded during the Extended Phase 1 Habitat Survey. These features consisted of linear features such as hedgerows, as well as habitat features such as grassland/scrub and woodland (Figure 22.6.1a to Figure 22.6.1g). Each transect, and associated figures detail the bat activity across the site, including the woodland adjacent to the substation.
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	The proposed cable corridor crosses the Sandlings Special Protection Area (SPA) and Leiston-Aldeburgh Site of Special Scientific Interest (SSSI) south of the Sizewell Gap Road. Preliminary Environmental Information (PEI) Report Chapter 22, Impact 1, considers that the worst-case scenario for crossing the SPA/SSSI is the use of open cut trenching and that mitigation measures associated with this technique can reduce the construction impacts on the designated sites to “Minor Adverse”. However, it is unclear whether the assessment has also considered the use of alternative techniques, such as horizontal directional drilling (HDD) as a means of crossing the site?	Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives and section 22.5.1 of this chapter, and taken into consideration for assessing construction impacts. The implications of crossing techniques on sensitive ornithological receptors is detailed further in Chapter 23 Onshore Ornithology .

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	PEI Chapter 6, section 6.7.3.1.2 of the PEI, makes reference to using HDD to cross the site, however this is not considered in Chapter 22. Whilst it is acknowledged that the HDD technique has its own limitations and impacts, we consider that the two methods must be assessed in order to ensure that the one that causes the least ecological impact is put forward as part of any Development Consent Order (DCO). In addition to the comments made above, we recommend that advice is sought from the land owner and land manager (the RSPB) on this matter.	Greater detail on the potential difference in impacts, e.g. between an open cut or HDD methodology for crossing the SPA is provided in Chapter 4 Site Selection and Assessment of Alternatives and section 22.5.1 of this chapter, and taken into consideration for assessing construction impacts. The implications of crossing techniques on sensitive ornithological receptors is detailed further in Chapter 23 Onshore Ornithology .
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	Chapter 22 of the PEI acknowledges that the proposed scheme is in close proximity to both Grove Wood County Wildlife Site (CWS), Knodishall Common CWS and Aldringham to Aldeburgh Disused Railway Line CWS. Whilst we note the conclusion that effects on these sites will be avoided, it must be ensured that all construction and operational lighting is carefully controlled to ensure that there is no light spill towards these sites. It must also be ensured that construction activities suitably buffer these sites to ensure that no impacts may arise from sources such as increase noise and dust.	Chapter 29 Landscape and Visual Impact addresses impact to these locations. Section 22.6.1.4 of this chapter includes references to Groove Wood
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	Chapter 22 (Impact 4) of the PEI identifies that there will be the loss of up to 0.9Ha of broadleaved woodland where the cable corridor crosses Aldeburgh Road. The assessment concludes that unmitigated this would constitute a “Minor Adverse” impact. Whilst generic mitigation measures are identified in section 22.6.1.4.2, these will not mitigate the impact identified and therefore the level of impact is predicted to remain “Minor Adverse” after these measures have been implemented. Broadleaved woodland, under the classification Lowland Mixed Deciduous Woodland, is a UK Priority habitat (under Section 41 of the Natural Environment and Rural Communities (NERC) Act	Impact 4 rationale: the magnitude of effect is considered to be low given the extent of similar habitats within the surrounding area that will be retained. Following the implementation of the agreed mitigation measures considered necessary there should be no net loss of trees.

Consultee	Date/ Document	Comment	Response / where addressed in the ES
		(2006)) and therefore this proposal would result in the loss of a UK Priority habitat.	
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	We note that the mitigation proposed includes the planting of replacement woodland following the completion of the works, although planting cannot be undertaken on the cable route. We query whether this replacement planting is mitigation, or whether it actually forms compensation under the mitigation hierarchy?	Replanting of replacement woodland would be defined, under the mitigation hierarchy, as restoration: measures taken to restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/ or minimised. The area of woodland that will be lost will be very low and least an equivalent area of lost woodland will be replanted. This is detailed further within section 22.6.1.4 of this chapter. Protecting root systems, introducing biosecurity measures and assessing trees to be removed would be classified as minimisation: measures taken to reduce the duration, intensity and / or extent of impacts (including direct, indirect and cumulative impacts, as appropriate) that cannot be completely avoided, as far as is practically feasible.
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	Also, the positioning of the proposed substations will result in the loss of a small area of broadleaved woodland (approximately 0.3Ha) which is not assessed in the PEI, and therefore no potential mitigation or compensation measures are proposed. Felling of this area of woodland would further increase the amount of loss a UK Priority habitat as a result of this proposed development.	Section 22.6.1.4 of this chapter details impact to woodland and highlights those areas within the order limits that have been identified as being suitable for tree planting. The area of woodland that will be lost will be very low and least an equivalent area of lost woodland will be replanted. The methodology and timescales of re-planting will be agreed post-consent with the relevant stakeholders through submission of the OLEMS, as secured under the requirements of the draft DCO.

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	The PEI (Chapter 22, Impact 5) identifies that a number of hedgerows will need to be crossed by the cable corridor, a suite of generic mitigation measures are proposed to mitigate impacts on hedgerows. The PEI concludes that the implementation of these measures will reduce the impact on hedgerows from “Major Adverse” to “Minor Adverse”. Whilst the potential mitigation identified does include the reduction in width of the cable corridor where it crosses a hedgerow, we consider that other mitigation measures such as horizontal directional drilling (HDD) or other trenchless techniques must be considered for such crossings. The use of such techniques could significantly reduce the impact of the cable route on hedgerows.	HDD and trenchless techniques are not considered for crossing hedgerows. Where possible, a minimum swathe (16.1m) at important hedgerows will be used. This is deemed to be sufficient and suitable mitigation.
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	Also, whilst the PEI considers hedgerows to be affected by the cable route, it does not appear to assess impacts on those within the proposed substations area. Figure 22.4f shows that both the East Anglia ONE North substation and the National Grid substation would result in the loss of hedgerows. No assessment of this or application of the mitigation hierarchy to see if impacts can be avoided or mitigated has been included in the PEI and therefore, we do not consider that the conclusion that impacts on hedgerows can be reduced to “Minor Adverse” with mitigation is correct based on the evidence available.	See Technical Note within Annex 2 of the Extended Phase 1 Habitat Survey (Appendix 22.3). This details the hedgerows and their composition within the substation area. All hedgerows will be reinstated where possible, as detailed in the OLEMS submitted with this DCO application, as secured under the requirements of the draft DCO. A detailed hedgerow schedule has been provided as part of the OLEMS.
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	We note that the PEI (Impact 7) states that the preferred option for the crossing of watercourses will be using open cut trenches due to the narrow nature of the watercourses to be crossed. Whilst we acknowledge that this technique can be used successfully and with relatively little long-term impact, we query whether the use of alternative techniques (such as HDD) has been assessed as part of the PEI and whether the use of such alternatives may reduce the predicted residual construction impact below “Minor Adverse”?	At the Hundred River, it is intended an open cut methodology is used to install cable ducts. Crossing methodology Options are detailed in Chapter 6 Project Description . A trenchless technique may be used but this does not include an HDD technique.

Consultee	Date/ Document	Comment	Response / where addressed in the ES
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	We note the conclusions in the PEI (Impact 9) in relation to bats, we are significantly concerned that even with the implementation of the identified mitigation measures the construction impacts on this group cannot be reduced below “Moderate Adverse”. The proposed cable route appears likely to result in the loss of, or damage to, a number of commuting/foraging routes used by a range of bat species including rare species such as barbastelle (<i>Barbastella barbastellus</i>). PEI Chapter 22, paragraph 191, states that all hedgerows where barbastelle were recorded or which had a ‘high’ level of bat usage will be considered ‘Important’ for bats, however it is not clear which hedgerows this relates to or how the mitigation measures identified will be implemented in these locations? As with our comments relating to and hedgerow loss (section 1.2.2 above) we do not consider that all potential mitigation techniques for hedgerow crossings have been adequately considered, and therefore more could be done to mitigate the identified impacts on bats.	Appendix 22.6 details where <i>Barbastelle</i> were recorded (transects 3, and 4). All UK habitats of principal importance are detailed in Figure 22.1 . Key habitats are detailed in Figure 22.3 . Transect figures are as follows: 22.6.1c, 22.6.1d .
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	PEI Figure 22.7c shows that the cable corridor will pass through an area of woodland considered to be of ‘High’ value for bats and PEI Chapters 6 and 22 indicate that there will be loss of woodland in this area. This may also include the loss of trees assessed as being of ‘High’ or ‘Moderate’ value for roosting bats. Neither the measures identified for woodland loss (22.6.1.4.2) or impacts on bats (22.6.1.9.2) adequately mitigate or compensate for this impact, in part resulting in the conclusion that even with mitigation the project will result in a “Moderate Adverse” impact on bats during the construction phase. Given the national importance of this ecological receptor we do not consider that such a residual construction impact is acceptable.	Given the sensitivity of bats as a receptor, it is considered the impact of ‘Moderate Adverse’ as an impact is an appropriate assessment of the effects on this species. However, the mitigation provided is appropriate and surveys undertaken suitable to ascertain the impact on this species. Section 22.6.1.4 of this chapter details impact to woodland and highlights those areas within order limits that have been identified as being suitable for tree planting. The area of woodland that will be lost will be very low and least an equivalent area of lost woodland will be replanted.

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	We also note from the bat survey report (PEI Appendix 22.4) that a single recording of a lesser horseshoe bat (<i>Rhinolophus hipposideros</i>) was made within the Transect 3 area. There is only one other known location for this species in Suffolk, located in the far west of the county, where a single lesser horseshoe bat was recorded in hibernation for a number of years. Prior to the West Suffolk record that had only been one other recording of this species in the county in the last 100 years ¹ . Lesser horseshoe bats are restricted to Wales, the south-west of England and eastwards to Warwickshire, with the closest known colony to Suffolk being over 90 miles away. The recording of this species within Transect 3 is therefore of considerable importance and should be investigated in more detail in order to ensure that no adverse impacts occur on this species, should a hitherto unknown population be present in the area.	Further investigation is not considered necessary due to the robust survey records, mitigation and reporting for this species. The impact assessment baseline is detailed within section 22.5.4 of this chapter, including reference to the recording of a lesser horseshoe bat. This baseline is fully considered when assessing potential impacts on bat populations in section 22.6.1.9 of this chapter.
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	Finally, with regard to best practice for bats and lighting it should be noted that new guidance from the Bat Conservation Trust and Institute of Lighting Professionals may supersede the 2009 guidance quoted in the PEI.	Updated throughout the ES.
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	Chapter 22 (Impact 10) identifies mitigation measures to reduce construction impacts on great crested newts. These include the potential for trapping and translocation of great crested newts, however no further details are provided on where this measure will be implemented or where translocated animals will be moved to. Whilst translocation can be an acceptable mitigation technique, it must be a last resort and only undertaken where it can be confirmed that the favourable conservation status of great crested newt populations can be maintained. This must be demonstrated as part of the Environmental Statement accompanying the Development Consent Order (DCO).	Suitable ponds will be identified post consent should translocation be required.

East Anglia ONE North Offshore Windfarm
Environmental Statement

Consultee	Date/ Document	Comment	Response / where addressed in the ES
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	Chapter 22.7 of the PEI assesses the likely cumulative impacts of the East Anglia ONE North project, firstly against the proposed East Anglia TWO project and then against other plans and projects. We note that it is considered that scenario 2 (construction of East Anglia ONE North and East Anglia TWO with a gap between the projects) is likely to result in the greatest cumulative impact. However, it is unclear how it is intended that this cumulative impact would be reduced if both projects go ahead. Would the commitment that the projects would be constructed simultaneously (scenario 1) be secured in the DCOs for both projects?	A cumulative impact assessment CIA is provided in Appendix 22.2 . This details the construction scenario of building the proposed East Anglia ONE North project and the proposed East Anglia TWO project simultaneously or sequentially.
The Wildlife Trusts / Suffolk Wildlife Trust	26/03/2019 Section 42 Consultation Response	The proposed construction and operation of the East Anglia ONE North offshore wind farm has the potential to result in impacts on a range of ecological receptors, including “Moderate Adverse” impacts on bats and “Minor Adverse” impacts on designated sites, woodland, hedgerows, rivers and great crested newts, even following the implementation of mitigation measures. From the information presented in the PEI report we are concerned that the full range of potential mitigation measures have not been adequately considered and therefore the proposals have the potential to result in greater impacts than may be necessary. In particular, we are significantly concerned about the predicted “Moderate Adverse” impact that will arise on bats during construction. We urge ScottishPower Renewables to undertake further assessment of these impacts in order to determine whether the project can be adjusted to avoid them or whether enhanced mitigation measures can be delivered to address them.	Mitigation measures are provided in section 22.6 of this chapter and site investigation results are provided within the Appendices 22.3, 22.4, 22.5 and 22.6 which addresses the sensitivity of the species and habitats located within the onshore development area.

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