East Anglia TWO Offshore Windfarm

Appendix 6.1

Project Description Consultation Responses

Environmental Statement
Volume 3

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Glossary of Acronyms

AIS	Air Insulated Substation
AONB	Area of Outstanding Natural Beauty
AoS	Area of Search
CCS	Construction Consolidation Sites
DCO	Development Consent Order
EA	East Anglia
EDF	Électricité de France
EIA	Environmental Impact Assessment
ES	Environmental Statement
EU	European Union
GIS	Gas Insulated Substation
HDD	Horizontal Directional Drilling
HM	Her Majesty's
IFCA	Inshore fisheries Conservation Authority
Lidar	Light Detection and Ranging
MCA	Maritime and Coastguard Agency
MGN	Marine Guidance Note
MMO	Marine Management Organisation
NG	National Grid
NGET	National Grid Electricity Transmission
OWF	Offshore Windfarm
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
SPR	Scottish Power Renewables
SSSI	Special Site of Scientific Interest
SuDS	Sustainable Drainage System
SZB	Sizewell B
SZC	Sizewell C

Glossary of Terminology

Applicant	East Anglia TWO 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.
Construction, operation and maintenance platform	A fixed offshore structure required for construction, operation, and maintenance personnel and activities.
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 TWO project	The proposed project consisting of up to 75 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 TWO 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.
Inter-array cables	Offshore cables which link the wind turbines to each other and the offshore electrical platforms. These cables will include fibre optic cables.
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.

Meteorological mast	An offshore structure which contains metrological instruments used for wind data acquisition.
Mitigation areas	Areas captured within the onshore development area specifically for mitigating expected or anticipated impacts.
Marking buoys	Buoys to delineate spatial features / restrictions within the offshore development area.
Monitoring buoys	Buoys to monitor *in situ* condition within the windfarm, for example wave and metocean conditions.
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 TWO 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 TWO project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia TWO 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.
Offshore cable corridor	This is the area which will contain the offshore export cables between offshore electrical platforms and landfall.
Offshore development area	The East Anglia TWO windfarm site and offshore cable corridor (up to Mean High Water Springs).
Offshore electrical infrastructure	The transmission assets required to export generated electricity to shore. This includes inter-array cables from the wind turbines to the offshore electrical platforms, offshore electrical platforms, platform link cables and export cables from the offshore electrical platforms to the landfall.
Offshore electrical platform	A fixed structure located within the windfarm area, containing electrical equipment to aggregate the power from the wind turbines and convert it into a more suitable form for export to shore.
Offshore export cables	The cables which would bring electricity from the offshore electrical platforms to the landfall, these cables will include fibre optic cables.
Offshore infrastructure	All of the offshore infrastructure including wind turbines, platforms, and cables.
Offshore platform	A collective term for the construction, operation and maintenance platform and the offshore electrical platforms.

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 TWO 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 TWO 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 TWO project.
Platform link cable	Electrical cable which links one or more offshore platforms. These cables will include fibre optic cables.
Safety zones	A marine area declared for the purposes of safety around a renewable energy installation or works / construction area under the Energy Act 2004.
Scour protection	Protective materials to avoid sediment being eroded away from the base of the foundations as a result of the flow of water.
Transition bay	Underground structures at the landfall that house the joints between the offshore export cables and the onshore cables.

6 .1 Project Description Consultation Responses

6.1 Introduction

1. This appendix covers those statutory consultation responses that have been received as a response to the Scoping Report (2017) and the Preliminary Environmental Information Report (PEIR) (2018).

2. As Section 42 consultation for the proposed East Anglia TWO project was conducted in parallel with the proposed East Anglia ONE North project, where appropriate, stakeholder comments which were specific to East Anglia ONE North, but may be of relevance East Anglia TWO, have also been included in the consultation responses for East Anglia TWO.

3. Responses from stakeholders and regard given by the Applicant have been captured in ***Table A6.1***.

Table A6.1 Consultation Responses Related to *Chapter 6 Project Description*

Consultee	Date / Document	Comment	Response / where addressed in the ES
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.			
Norfolk County Council	01/11/2017 Scoping Response	The PEI will need to address whether the existing overhead lines and substation are sufficient to be able to cope with the Wind Farm, or whether there will need to be any upgrading of any existing overhead power lines. The PEI should also address the cumulative impact on the Grid Network arising from any existing or proposed Wind Farm in the area.	Information received from National Grid to date states that the existing overhead lines and substation are sufficient to be able to cope with the new connection. Information on the grid connection location, capacity of the network and the National Grid CION process is included within ***section 4.7.5*** of ***Chapter 4 Site Selection and Assessment of Alternatives***. The proposed East Anglia TWO project is only required to assess the impacts associated with the proposed East Anglia TWO project. Future upgrade requirements are not discussed within the assessments in the ES. Infrastructure required to connect into the National Grid is described in ***section 6.7.9*** of this chapter***.***
Norfolk County Council	01/11/2017 Scoping Response	In the event that new power lines are needed (or existing power lines up-graded) or any other infrastructure needs up-grading (e.g. sub-station) there would need to be a description of the route(s) including plans at an appropriate scale incorporating, for example: • An assessment of their impact (e.g. photomontages etc); • Details of temporary construction compounds; and • Identification of any sensitive features along route. The PEI should consider the possibility of putting overhead power lines underground in order to minimise their impact.	
Suffolk Fire and Rescue Service	28/11/2017 Scoping Response	The Suffolk Fire and Rescue Service requests that early consideration is given during the design stage of the development for both access for fire vehicles and the provision of water for fire-fighting which will allow us to make final consultation at the planning stage'	This information will be included in the Design and Access Statement submitted as part of the DCO application.

Consultee	Date / Document	Comment	Response / where addressed in the ES
Public Health England	05/12/2017 Scoping Response	The ES should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land. Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.	This information is detailed in ***sections 6.6-6.7*** of this chapter and also assessed within all relevant onshore technical ***Chapters 18-30.***
Maritime and Coastguard Agency	05/12/2017 Scoping Response	The turbine layout design will require MCA approval prior to construction to minimise the risks to surface vessels, including rescue boats, and Search and Rescue aircraft operating within the site. As such, MCA will seek to ensure all structures are aligned in straight rows and columns. Any additional navigation safety and/or Search and Rescue requirements, as per MGN 543 Annex 5, will be agreed at the approval stage	Finalised turbine layouts will be agreed with the MMO in consultation with MCA prior to construction and will be in line with MGN 543.
Maritime and Coastguard Agency	05/12/2017 Scoping Response	Particular attention should be paid to cabling routes and where appropriate burial depth for which a Burial Protection Index study should be completed and, subject to the traffic volumes, an anchor penetration study may be necessary. If cable protection is required e.g. rock bags, concrete mattresses, the MCA would be willing to accept a 5% reduction in surrounding depths referenced to Chart Datum. This will be particularly relevant where depths are decreasing towards shore and potential impacts on navigable water increase.	The requirement for cable protection is discussed in ***section 6.5.11*** of this chapter.
Maritime and Coastguard Agency	05/12/2017 Scoping Response	Any application for safety zones will need to be carefully assessed and additionally supported by experience from the development and construction stages.	Safety zones are discussed in ***section 6.5.12*** of this chapter and in ***Chapter 13 Commercial Fisheries***

Consultee	Date / Document	Comment	Response / where addressed in the ES
			and ***Chapter 14 Shipping and Navigation.***
Marine Management Organis**ation**	07/12/2017 Scoping Response	Operation and maintenance activities for EA2 have been included in the Scoping Report (Section 1.5.6: 'Operations and Maintenance Strategy'). The MMO recommends that operation and maintenance activities are fully detailed and that consideration is given to the potential impact of such works in the ES. Details within the 'Rochdale Envelope' should include the maximum number of operation and maintenance events, maximum frequency and the potential scope of the works, i.e. for export or inter-array cable repairs, turbine maintenance, etc.	This chapter details Operations and Maintenance (***section 6.5.16*** of this chapter) activities and potential impacts of these activities are considered within offshore technical ***Chapters 7 - 17*** where relevant.
Marine Management Organisation	07/12/2017 Scoping Response	The MMO acknowledge that the impacts of dredging and disposal activities on the marine environment, including the composition of the material and potential disposal sites have been considered. However, a description of the dredging method and the amount of material that will be removed and to what depth will need to be provided. The 'Disposal Site for the Proposed East Anglia THREE Project Site Characterisation Document' submitted to the MMO for the East Anglia Three OWF project will need to be updated, taking account of the additional material proposed for disposal, which should include as a minimum: • The need for the new disposal site; • The dredged material characteristics; • The disposal site characteristics; • The assessment of potential effects and • The reasons for the site selection.	Potential dredging requirements are detailed in ***section 6.5*** of this chapter A Site Characterisation Document has been provided for the proposed East Anglia TWO project with the DCO application. Information on disposal sites is included in ***section 6.5.14*** of this chapter. The potential for contaminated sediment to be present within the offshore development area is discussed in ***Chapter 8 Marine Water and Sediment Quality.***

Consultee	Date / Document	Comment	Response / where addressed in the ES
		Relevant chapters of the ES should provide sufficient information to inform the amended disposal site characterisation report, putting the evidence above into context with the proposed disposal site.	
Marine Management Organisation	07/12/2017 Scoping Response	Dredge material destined for disposal within a designated site typically requires contaminant characterisation by a certified laboratory. Should characterisation results show the dredged material to be contaminated, the applicant would need to consider other disposal methods in line with the EU Waste Hierarchy Framework. Under certain circumstances contaminant testing may not be required for a licence determination, for example if there is sufficient evidence that the material comprises clean sand or gravel without any mud/silt fractions.	The laboratory used to analyse contaminant samples was Socotec which is MMO certified.
Suffolk County Council & Suffolk C**oastal District Council**	08/12/2017 Scoping Response	Consider in-life operational (50 years?) maintenance of cables when assessing preferred method of cable landfall. For example, the risk of uncovering by erosion is greater with the beach buried option than HDD to lower level and offshore break out point. Consider the need to monitor beach levels and impact of vehicles on the beach required to re-bury cables if/ when uncovered. Will shallow cables impose constraints on use of beach by other vehicles if cables are uncovered or depth of coverage reduces? Shallow cables would also require the operator to monitor. Decommissioning impacts of different landfall installation methods must also be considered	Horizontal directional drilling (HDD) will be used to install the cable ducts at the landfall, avoiding impacts upon the beach. A full description of the location and methodology is provided in ***section 6.6*** of this chapter.
Suffolk County Council & Suffolk Coastal District Council	08/12/2017 Scoping Response	It is not clear if the Applicant is proposing to reduce the number of turbines in the event that 19MW generators are used, clearly fewer turbines would be required to produce the same output in that case. The reduction in turbine numbers would be likely to reduce the environmental impacts of the scheme.	Turbine numbers and size of turbines is explained in ***section 6.5*** of this chapter.
Natural England	08/12/2017 Scoping Response	Natural England advises that a minimum offshore cable burial depth of 1m be achieved.	The preferred construction technique and depth of burial for the offshore electrical infrastructure would be

Consultee	Date / Document	Comment	Response / where addressed in the ES
			decided after the pre-construction geotechnical ground investigation is undertaken and a risk assessment and a lifetime maintenance assessment is completed. See ***section 6.5.11.3*** of this chapter.
Natural England	08/12/2017 Scoping Response	Natural England would welcome a clear description and assessment of the pros and cons of the scour and cable protection methodologies considered to ensure we achieve the best environmental option. This assessment should clearly present the full, but realistic extent of cable protection required. Consideration should be given to using protection that can be recovered on decommissioning if required i.e. mattresses that won't degrade, rock that can be recovered.	Scour and cable protection is discussed in ***sections 6.5.4*** and ***6.5.11.5*** of this chapter***.*** In addition, an Outline Scour and Cable Protection Plan has been submitted with the DCO appllication which will detail the scour and cable protection proposed for the project.
Natural England	08/12/2017 Scoping Response	Natural England advises that the use of HDD is the preferred method for the landfall installation as it will minimise environmental impact.	HDD will be used to install the cable ducts at the landfall, avoiding impacts upon the beach. A full description of the location and methodology is provided in ***section 6.6*** of this chapter***.***
Natural England	08/12/2017 Scoping Response	What is the reasoning behind wanting to connect electrical infrastructure between the two proposed OWFs? Has the potential effects of this been scoped into any environmental assessments? Will there be the need for greater amounts of scour protection as result?	Interconnection between the proposed East Anglia TWO and East Anglia ONE North projects is no longer part of the project design envelope.

Consultee	Date / Document	Comment	Response / where addressed in the ES
The Environment Agency	08/12/2017 Scoping Response	Section 1.5.3 of the Scoping Report further discusses landfall, and the potential installation methods. It is noted that there is a SSSI present spanning the proposed landfall area, in addition to areas of intertidal habitats. The longer HDD option from transition bay locations would appear to be the preferred option in order to avoid impacting upon features including the Leiston-Aldeburgh SSSI (particularly those elements within it such as coastal vegetated shingle).	HDD will be used to install the cable ducts at the landfall, avoiding impacts upon the beach. A full description of the location and methodology is provided in ***section 6.6*** of this chapter***.***
The Environment Agency	08/12/2017 Scoping Response	Similarly, with regard to section 1.5.4 of the Scoping Report (onshore transmission works), it must be ensured that works are sited, as far as is practically possible, to avoid impacting upon the footprints of protected areas in the onshore area. The implications of jointing bays and the cable corridor must be considered well in advance to avoid ecological damage and disturbance, and to enable any necessary mitigation to be planned.	Considerations for the siting of onshore infrastructure are discussed in ***sections 6.6*** and ***6.7*** of this chapter
Natural England	08/12/2017 Scoping Response	Natural England welcomes the sharing of onshore substation compound works and mitigation between EA1N and EA2. Any publicly available information from the Sizewell C project should be used to inform the PEI.	Noted.
Natural England	08/12/2017 Scoping Response	Natural England queries why floating turbines are not being considered as a foundation option?	The Applicant does not consider the East Anglia TWO windfarm site suitable for floating foundations.
Natural England	08/12/2017 Scoping Response	We note that SPR is proposing to install ducting for the EA1N onshore electrical cables during the EA2 construction. We seek clarification that the cables will follow the same route and be constructed simultaneously within the onshore zone. If not, a more thorough cumulative ecology, and landscape and visual impact assessment is likely to be required.	Consent for the ducting for East Anglia ONE North onshore electrical cables during construction of those for East Anglia TWO will not be sought. Two scenarios for construction of the proposed East Anglia TWO and East Anglia ONE North projects are described, in which the projects are

Consultee	Date / Document	Comment	Response / where addressed in the ES
			constructed together or sequentially (see ***Appendix 6.1***). The onshore cable corridor will accommodate both sets of cables and the substations will be co-located. Onshore cumulative impacts of the proposed East Anglia TWO and East Anglia ONE North projects are considered in technical ***Chapters 18 – 30***.
National Grid	08/12/2017 Scoping Response	National Grid's Overhead Line/s is protected by a Deed of Easement/Wayleave Agreement which provides full right of access to retain, maintain, repair and inspect our asset	The Applicant is working closely with NGET both to develop the design of the National Grid infrastructure and to ensure all onshore infrastructure is sited and constructed in line with the required standards
National Grid	08/12/2017 Scoping Response	If a landscaping scheme is proposed as part of the proposal, we request that only slow and low growing species of trees and shrubs are planted beneath and adjacent to the existing overhead line to reduce the risk of growth to a height which compromises statutory safety clearances. □ Drilling or excavation works should not be undertaken if they have the potential to disturb or adversely affect the foundations or "pillars of support" of any existing tower. These foundations always extend beyond the base area of the existing tower and foundation ("pillar of support") drawings can be obtained using the contact details above □ National Grid Electricity Transmission high voltage underground cables are protected by a Deed of Grant; Easement; Wayleave Agreement or the provisions of the New Roads and Street Works Act. These provisions provide National Grid full right of access to retain, maintain, repair and inspect our assets. Hence, we require that no permanent / temporary structures are to be built over our cables or within the easement strip. Any such proposals should be	

Consultee	Date / Document	Comment	Response / where addressed in the ES
		discussed and agreed with National Grid prior to any works taking place. □ Ground levels above our cables must not be altered in any way. Any alterations to the depth of our cables will subsequently alter the rating of the circuit and can compromise the reliability, efficiency and safety of our electricity network and requires consultation with National Grid prior to any such changes in both level and construction being implemented.	
National Grid	08/12/2017 Scoping Response	We would request that the potential impact of the proposed scheme on National Grid's existing assets as set out above and including any proposed diversions is considered in any subsequent reports, including in the Environmental Statement, and as part of any subsequent application.	
Suffolk County Council & Suffolk Coastal District Council	08/12/2017 Scoping Response	Details of any site worker accommodation indicating; extent of use, number of workers accommodated, amenities and drainage, should be provided.	Details are provided in ***sections 6.6*** and ***6.7*** of this chapter.
Suffolk County Council & Suffolk Coastal District Council	08/12/2017 Scoping Response	A decommissioning plan, detailing all site reinstatements and removal of commercial waste, should be presented. Restoration will be key to a successful decommissioning plan.	S***ections 6.6*** and ***6.7*** of this chapter describe the works required for construction, operation and decommissioning of the proposed East Anglia TWO project Reinstatement is covered in ***section 6.7.3.17*** of this chapter for the onshore cable route and grading and earthworks at the substations covered in ***section 6.7.8*** of this chapter. Information regarding the management of waste is provided in

Consultee	Date / Document	Comment	Response / where addressed in the ES
			Chapter 18 Ground Conditions and Contamination.
Suffolk County Council & Suffolk Coastal District Council	08/12/2017 Scoping Response	More detailed information related to all licensed contractors and disposal facilities used for the movement and storage of waste materials during the construction of this development. This should be provided in addition to the requirements of the Environment Agency.	Further detail regarding the management of waste material can be found in ***Chapter 18 Ground Conditions and Contamination.***
Suffolk County Council & Suffolk Coastal District Council	08/12/2017 Scoping Response	A haul road is proposed with a 50m working width. Is a constructed haul road necessary or could temporary tracking be used? This is queried as there is a massive length of haul road being installed for EA One, which could be replaced for the most part with the use of temporary tracking and tracked vehicles (depending on soil conditions). Positioning jointing bays near to road access would enable any haul road to be kept to a minimum. Installing a haul road results in additional vehicles and importation of materials and takes time and has a cost involved that could be minimised and possible environmental impacts avoided.	The working width for East Anglia TWO's onshore cable route will be up to 32m, this will encompass the trenches, temporary haul road and spoil storage. The EIA will be based on a worst case scenario whereby the full length of the onshore cable route requires temporary haul road which provides flexibility.
The Planning Inspectorate	20/12/2017 Scoping Response	Paragraph 180 of the Scoping Report states that major accidents and disasters will be considered in the EIA in the context of how the Proposed Development is designed and the measures in place in case of emergency, for example, in relation to pollution prevention and response. The EIA should also identify if the Proposed Development itself has the potential to cause major accidents or disasters during construction, operation or decommissioning.	Noted, this is discussed in ***section 6.12*** of this chapter which describes the response to potential major accidents and disasters both onshore and offshore.
The Planning Inspectorate	20/12/2017 Scoping Response	The Applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the Proposed Development have yet to be finalised and provide the reasons. At the time of application, any Proposed Development parameters should not be so wide-ranging as to represent effectively different developments. The development parameters will need to	This chapter provides a detailed description of the design envelope.

Consultee	Date / Document	Comment	Response / where addressed in the ES
		be consistently and clearly defined in both the draft DCO (dDCO) and in the accompanying ES. It is a matter for the Applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the Proposed Development in the ES must not be so wide that it is insufficiently certain to comply with the requirements of Regulation 14 of the EIA Regulations.	
The Planning Inspectorate	20/12/2017 Scoping Response	The Inspectorate understands that at this stage the extent of the Proposed Development site, both offshore and onshore, is not yet determined, however reminds the Applicant that the PEI should include a discrete section that fully describes both parts of the site.	Both onshore and offshore aspects are detailed within this chapter in ***sections 6.5*** and ***6.7*** of this chapter.
The Planning Inspectorate	20/12/2017 Scoping Response	Although the Scoping Report identifies that the area of the windfarm site is approximately 255km^2, the Method Statements (MSs) contained in the Appendices state that it is 257km^2. The northern export cable corridor route shown in the figures contained in the MSs that identify the windfarm site and the AOS (Physical Processes Figure 1, for example) differs to the northern route shown in Figure 1.1 in the Scoping Report. Part of the route to the north east of where the northern and southern route join appears similar to the East Anglia ONE North AoS. The applicant should ensure that the descriptions and figures in the ES of both the site and the Proposed Development are accurate and consistent throughout the ES and in the DCO application documents.	Noted.
The Planning Inspectorate	20/12/2017 Scoping Response	Section 1.5.1 of the Scoping Report indicates that both a meteorological mast and LIDAR buoys are expected to comprise key offshore components of the Proposed Development; however, Section 1.5.2 paragraph 79 indicates that one or the other would be utilised. It is stated in Table 1.3 that there would be two offshore export cables while Section 1.5.3 notes that one transition bay would be needed for each offshore cable and there would be 'up to' two	Noted. The number and type of buoys (including Lidar) to be used are described in ***6.5.7*** and ***6.5.8*** of this chapter and the meteorological mast is described in ***section 6.5.6*** of this chapter.

Consultee	Date / Document	Comment	Response / where addressed in the ES
		transition bays. The description of the Proposed Development must be consistent throughout the ES, notwithstanding that alternative options may be presented.	
The Planning Inspectorate	20/12/2017 Scoping Response	The description of the Proposed Development in Section 1.5 of the Scoping Report includes a fleeting reference to offshore fibre optic communications cables and the need for link boxes housing joints. However, other than a brief reference to potential impacts of the link boxes in the traffic and transport chapter (paragraph 614) these components are not discussed elsewhere in the Scoping Report. The description of the Proposed Development in the PEI must be comprehensive, and an assessment of the potential impacts of the construction, operation and decommissioning of all of its component parts must be carried out.	Separate link boxes will be buried adjacent to the jointing bays. Offshore fibre optic cables will either be incorporated within export, inter-array and platform link cables or strapped to the outside of these. Onshore fibre optic cables will be laid adjacent to the electrical cables or installed within the electrical cable ducts.
Leiston-cum-Sizewell Town Council	21/12/2017 Scoping Response	The two substations specified are too high (21m) and the National Grid compound, along with these two stations seem to take up a very substantial area indeed – much more than the Gabbard and Galloper substations which we fought so hard to incorporate into our precious landscape. Surely these can be reduced?	The maximum building height at the onshore substation would be 15m above ground level with external electrical equipment up to 18m above ground level (see ***section 6.7.7*** of this chapter). The operational footprints of the onshore substation and National Grid substation will be reviewed through the detailed design phase of the project post-consent.
Leiston-cum-Sizewell Town Council	21/12/2017 Scoping Response	All the expected impacts seem to be covered but noise levels during construction and most certainly during operation must be clearly predicted and mitigated for to a very high level.	More information on potential noise impacts and proposed mitigation measures are detailed in ***Chapter 25 Noise and Vibration.***

Consultee	Date / Document	Comment	Response / where addressed in the ES
Leiston-cum-Sizewell Town Council	21/12/2017 Scoping Response	Crossing the B1122 seems, to the layman, to be a complicated exercise and one that will need careful explanation to the residents along that road – the scoping report should layout how drilling under accommodation affects properties and prove just how safe an underground cable (under your home) is.	Road crossing methods are discussed in ***section 6.7.3.10*** of this chapter. No onshore cables will be installed beneath residential property.
EDF Energy	22/12/2017 Email correspondence	As operator of the Sizewell B nuclear power station, EDF Energy has responsibilities for emergency planning under the Nuclear Site License conditions attached to SZB. EDF Energy has to be sure that any development within the emergency planning zone can be accommodated within the off-site emergency plan. Part of the EA1N and EA2 study area falls within this emergency planning zone. This means that measures would need to be put in place to ensure that the needs of staff, visitors and residents in the area have been addressed from an emergency planning point of view. EDF Energy would be pleased to discuss this matter with SPR and share its expertise on any potential issues.	The Applicant is in ongoing consultation with EDF. This ES and DCO application provide further detail to EDF Energy on the proposed East Anglia TWO project.
EDF Energy	22/12/2017 Email correspondence	EDF Energy must ensure its ongoing compliance with the provisions of the Nuclear Site License for SZB. We, therefore, expect SPR to cooperate fully and address any concerns, where appropriate, to ensure that there would be no adverse impact on the day-to-day running, security and safety of SZB. EDF Energy requires an opportunity to comment on the technical details of proposals, with specific regard to onshore operational assets including the access route to SZB (Sizewell Gap Road) and the adjacent utilities, the overhead 400kV lines, the emergency control centre and any aspects of the proposed development that could impact on these key assets (eg drainage and methods of work)	For emergency response procedures see ***section 6.12*** of this chapter.
EDF Energy	22/12/2017	SPR should also be aware that EDF Energy has the benefit of a bilateral agreement with the National Grid, entitled the Nuclear Site Licence Provisions Agreement (NSLPA). This agreement ensures	National Grid will engage with EDF Energy in this regard and the Applicant is liaising with National Grid.

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	Email correspondence	that the NG advises EDF of new connection arrangements and evaluates any consequential changes to the reliability, quantum and quality of supply to our nuclear power stations, both during our construction and operational phases. For this part of the process it will be necessary for SPR to provide NG with further details of the plant, and equipment proposed for the connection to ensure that the SZB nuclear safety case is not compromised. Clearance of the associated Engineering Change proposals will also be required prior to any connection and energisation of new assets to the transmission system.	
EDF Energy	22/12/2017 Email correspondence	EDF Energy will seek to ensure that any proposals, including EA1N and EA2 would not prejudice the future development plans, including areas up to the Sizewell Gap Road.	Information presented in this ES and DCO will provide EDF Energy with details of the Applicant's proposals.
EDF Energy	22/12/2017 Email correspondence	Whilst we understand that the start dates for EA1N and EA2 are indicative, it is likely that the construction period will coincide with that of SZC. EDF would expect the relevant ES to cover the potential in-combination effects	In-combination and cumulative effects are considered in each technical chapter as appropriate.
The following comments were made in response to the PEIR and were taken into account in the production of this ES.			
MMO	22/03/2019 Section 42 Consultation Response	The MMO requests clarification regarding the piling that will take place. It is currently unclear if piling will take place simultaneously or not for the installation of WTGs or other offshore platforms. This should be clarified in the Environmental Statement. If simultaneous is proposed, then underwater noise modelling for impacts to fish should be based on this scenario.	There will be no concurrent piling for wind turbines or offshore platforms. Moreover, there will be no concurrent piling between the East Anglia TWO and East Anglia ONE North projects. Text added to ***section 6.5.15.2.1*** of this chapter
MMO	22/03/2019	The MMO notes that the worst case scenario and total volumes for drill arisings are inconsistent at times between chapters. In chapter 6 it is stated that the estimated drill arisings for jacket Piles was 1080m^3 per pile (Section 6.5.4.1.4 paragraph 53) and 7953m^3 per	Monopile drill arisings should be 7,952.16m^3 so has been updated in ***Chapter 6 Project Description***. No estimates for drill arisings for other

Consultee	Date / Document	Comment	Response / where addressed in the ES
	Section 42 Consultation Response	pile for monopiles (section 6.5.4.4.4. paragraph 102). No other estimates are given for other type of foundation in this chapter. However in Chapter 9 table 9.2 (Impact 2) the drill arisings for the turbines (based on 60 x 300m turbines) was 47,713m^3. It does not mention which foundation type this is based on, however the numbers from chapter 6 do not seem to be relevant here, as 60 monopiles at 7953m^3 is far greater than the given estimate of 47,713m^3, and the same can be said for the jacket piles. These calculations and inconsistencies should be clarified upon and future documents amended to show the correct information.	foundation types are given because it is only monopiles and pin piles that potentially require drilling. The 47,712.94m^3 figure comes from the assumption of 10% of monopile foundations requiring drilling, the worst case of which is associated with 60 300m wind turbines. Text in ***sections 6.5.4.1.4*** and ***6.5.4.4.4*** of this chapter updated for clarification.
MMO	22/03/2019 Section 42 Consultation Response	Calculations in Chapter 6 and subsequent chapters should be reviewed and corrected as necessary. For example, the MMO notes the estimated drill arisings per monopile is stated as 7953m3 in section 6.5.4.4.4. paragraph 102, however in Chapter 7, table 7.3, the estimated drill arisings for the same size monopile is 7952m^3.	Estimated drill arisings should be 7,952.16m^3 per monopile, this was a rounding error. Text updated.
Suffolk Coast and Heath AONB Partnership	25/03/2019 Section 42 Consultation Response	The AONB Partnership consider that the developer should pay regard to the purposes of the nationally designated AONB when locating and designing the proposed Construction Consolidation Sites.	Proposed Construction Consolidation Sites (CCS) will be located according to the construction activities they are required for and with consideration of sensitive receptors. Function and locations of CCS are outlined ***section 6.6*** and ***6.7*** of this chapter.
Suffolk Coast and Heath AONB Partnership	25/03/2019 Section 42 Consultation Response	The AONB Partnership notes that the landfall site for the cables is to be within the nationally designated AONB. It acknowledges that ScottishPower Renewables state there will be no above ground infrastructure left after construction.	Noted.

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Suffolk Coast and Heath AONB Partnership	25/03/2019 Section 42 Consultation Response	While acknowledging that EA1N and EA2 are separate projects, ScottishPower Renewables have set a precedent of installing two cable routes at the same time at the Bawdsey to Bramford cable route. A similar approach here would minimise the impacts on the AONB and residents.	The Applicant notes the comments made by the Suffolk Coast and Heath AONB Partnership. The Applicant has committed to two construction scenarios (parallel construction or sequential construction). The option to duct will not be considered for East Anglia TWO and East Anglia ONE North. Construction methodology for the onshore cable route is outlined in ***section 6.7.3***.7 of this chapter.
Suffolk Coast and Heath AONB Partnership	25/03/2019 Section 42 Consultation Response	Maintenance and inspection infrastructure should be kept to a minimum and located and designed to minimise any adverse impacts on the AONB.	Noted. Maintenance and inspection infrastructure for the landfall is outlined in ***section 6.6.3.2*** of this chapter; with cable route maintenance and inspection infrastructure outlined in ***section 6.7.2.2*** of this chapter.
Suffolk Coast and Heath AONB Partnership	25/03/2019 Section 42 Consultation Response	Systems of work should include measures to minimise the impacts on the AONB characteristics. This should include, but not be limited to, measures to reduce the adverse impacts of light, dust, noise on the visual amenity and tranquillity of the AONB.	Noted. Mitigation measures to reduce potential impacts associated with light and visual amenity, dust, noise and tranquillity are outlined in ***Chapter 29 Landscape, and Visual Impact Assessment***, ***Chapter 19 Air Quality***, ***Chapter 25 Noise and Vibration*** and ***Chapter 30 Tourism, Recreation and Socio-Economics*** (respectively).
Environment Agency	26/03/2019	PEI Section 6.7.3.10.3 outlines the process and procedures to be applied to open cut watercourse crossings. It is stated that detailed method statements will be prepared for each crossing, but that the exact methodology would be decided by the works contractor. For	Noted. A proposed methodology for the watercourse crossing of the Hundred River is outlined in the

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	Section 42 Consultation Response	this approach to be acceptable, it must be ensured that an outline structure of key principles and requirements is agreed and forms part of any permission granted. We would be particularly concerned about the Hundred River crossing (as a main river).	Outline Code of Construction Practice (OCoCP).
Environment Agency	26/03/2019 Section 42 Consultation Response	PEI Sections 6.7.8.8; 6.7.10.1 & 6.7.10.2 all refer to the use of either mains foul drainage or a septic tank. In respect of any foul drainage requirements, septic tanks may not be acceptable in certain locations depending on ground conditions or if the location is close to mains sewer. Mains should be the first preference. It should also be confirmed that there is mains capacity available to receive all flows arising during the construction and operational phases of the scheme.	Noted.
Natural England	26/03/2019 Section 42 Consultation Response	Natural England have no substantive comments on this chapter. However, we would advise that the scoping responses in table 6.1 should be provided in an annex.	All consultation tables in the ES have been compiled within an appendix (this appendix – ***Appendix 6.1***).
Natural England	26/03/2019 Section 42 Consultation Response	Further evidence needs to be presented to support the figures relating to cable and scour protection.	A reduction in the worst case assumptions for export cable protection that were presented in the PEIR has occurred in light of this comment and in reference to realistic values from the East Anglia ONE project. The reduction is from 10 to 5% of the total length of each export cable requiring protection due to unsuitable ground conditions. Furthermore, analysis of geological data in the East Anglia TWO windfarm site confirmed the potential for rocky areas and so an assumption of up to 10% of inter-array and

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			platform link cables is considered to be justified. Text added to each foundation type section on justification for scour protection calculations.
Natural England	26/03/2019 Section 42 Consultation Response	To more fully understand how visitors would be affected it would be helpful to understand how much of the cable corridor within the AONB would be an active construction site at any one time. Will the ducting and cable be laid in sections and backfilled so that construction activities move forward, or will be whole 3km route within the AONB be excavated at the same time?	Cables trenches will be excavated and cables laid in within section and backfilled so that multiple sections can be in active construction at the same time. Further detail is provided in ***section 6.7.3.7*** of this chapter.
Natural England	26/03/2019 Section 42 Consultation Response	The onshore components of the EA2 project will also support the East Anglia One North scheme. From a landscape perspective it is of course preferable, if the electricity for both schemes has to be brought ashore within the AONB, for this to be the case because a single construction project limits the duration and extent of construction works within the designated area. It appears, but we would like confirmation, that the undergrounded infrastructure put in place for EA2 would not have to be exposed again for any alterations and upgrading for EA One North.	The excavations for the proposed East Anglia ONE North project would not require exposing the underground infrastructure put in place for the proposed East Anglia TWO project. See ***section 6.7.3.7*** of this chapter for further detail.
Natural England	26/03/2019 Section 42 Consultation Response	It would also be helpful to have confirmation that the cables are expected to last for the operational life of the two schemes. If that isn't the case could they be replaced or repaired without reopening the trench? This appears to be the case given that they would be contained within underground ducts through which the cables could be drawn.	The Applicant can confirm that the cables are expected to last for the operational life of the two schemes (with ongoing maintenance and checks). The possibility to replace or repair cables without trenches is dependent on whether the cables are installed via a ducting or direct lay method. Currently, both methods are proposed for both projects. See

Consultee	Date / Document	Comment	Response / where addressed in the ES
			section 6.7.3.7 of this chapter for further detail.
Natural England	26/03/2019 Section 42 Consultation Response	We note that the onshore construction phase will last for three to four years and would welcome clarification of whether: - four years applies to any of the works within the AONB or whether only the construction of the substations and alterations to overhead cables outside the AONB would go beyond three years; and - the time scale referred to includes both the undergrounding and full reinstatement of the cable corridor (reinstating arable and pasture land cover and replanting hedges) or just the burying and refilling of the trench and removal of fencing and other construction elements from the site.	None of the onshore construction phase will last for three to four years within the AONB. See ***section 6.9*** of this chapter for the onshore programme. Landfall, cable section 1 and cable section 2 fall within the AONB. The Applicant can confirm that the timescales referred to include both the undergrounding and full reinstatement of the onshore cable corridor.
Natural England	26/03/2019 Section 42 Consultation Response	We are aware that trees and potentially larger hedgerows cannot be retained or planted above the cable route. The intention 'to minimise the number of hedgerow crossings and utilise existing gaps in field boundaries if possible' is therefore also welcome.	Noted.
Natural England	26/03/2019 Section 42 Consultation Response	The PEIR explains that CCSs will be used for storage and to house administrative and welfare facilities. We would ask that these are kept to a minimum within the AONB. Information on exactly how many CCSs would be located within the designated area and their exact purpose would be welcome	Noted. Proposed CCS will be located according to the construction activities they are required for. Function and locations of CCS are outlined ***section 6.6*** and ***6.7*** of this chapter.
Natural England	26/03/2019 Section 42 Consultation Response	The impact of the construction will be significant. We would like to add that an important additional mitigation measure could be to find ways to speed up the completion of the cable route, albeit without compromising on care and attention to reinstatement, so that this part of the AONB can return to its role in helping to deliver the statutory purpose of the area as soon as possible.	Noted. The Applicant will explore the possibility of speeding up the construction programme post-consent through the detailed design process. See ***section 6.9.6*** of this chapter for an indicative refined programme.

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Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	The Councils note the preliminary masterplan and design proposals within the PEIRs. It is expected that there will be considerable and ongoing discussions with SPR prior to submission of the projects for DCO in order to refine the design and layout of the proposals.	Noted.
Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	The masterplan as it currently stands does not adequately address the Councils' concerns. A significant challenge for SPR will be in dealing with the competing demands placed on the design of the scheme and trying to accommodate these demands within such a constrained site. For example the indicative landscape mitigation plan for the substations shows significant amounts of new woodland screening that appears to have been designed with no regard to the setting of the heritage assets or the impact on the historic landscape features. Such 'mitigation' risks adding to the harm of the heritage assets by further changing their relationship with the surrounding landscape.	The Applicant is committed to working with the Local Planning Authority to develop an appropriate masterplan for the substation site that incorporates necessary landscaping proposals for screening purposes that does not have a significant impact on cultural heritage assets. An updated version of the landscaping proposals is presented within the Outline Landscape and Ecological Management Strategy (OLEMS) submitted with this DCO application.
Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	The planting proposals need to be reflective of the prevailing surrounding landscape pattern and the choice of planting should reflect the landscape character and growing conditions. The current scheme appears to focus solely on the screening function of the planting and does not take into account the existing landscape pattern.	The Applicant is committed to working with the Local Planning Authority to develop an appropriate masterplan for the substation site that reflects the prevailing surrounding landscape pattern and an appropriate choice of planting. An updated version of the landscaping proposals is presented within the OLEMS submitted with this DCO application.
Suffolk County Council and Suffolk	26/03/2019	The levels across the site need to be fully understood in order to understand the effectiveness of the planting proposals as screening. The masterplan does not include any details in relation to the levels	The Applicant has used Lidar data to ascertain 1m contours for the substation site. These contours are

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Coastal District Council	Section 42 Consultation Response	of the site, without this information proper assessment of the masterplan is not possible.	used to inform the substation site design, masterplan and assessments. An updated version of the landscaping proposals (including contour mapping) is presented within the OLEMS submitted with this DCO application.
Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	It is important that a comprehensive scheme of offsite planting is produced. Offsite planting can deliver more rapid and timely mitigation whilst the large onsite planting scheme is developing. Key locations for hedgerow reinforcement and offsite planting should be identified and included in either the applications or a legal agreement with the relevant parties. It is essential that the mechanism to secure and deliver offsite planting is considered up front in the process and not left as an afterthought.	The Applicant is committed to working with Local Planning Authority to develop a comprehensive scheme of offsite planting. This will be agreed outside this Environmental Statement as it cannot be agreed through the Development Consent Order process. The Applicant has presented initial proposals to the Local Planning Authority for discussion.
Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	The masterplan has been designed based on both EA1N and EA2 projects being approved and the use of an AIS National Grid substation. Although the visualisations demonstrate a GIS option, the implications for this option for the design of the mitigation and consequent impacts on the schemes should be explored. The utilisation of GIS technology could allow for greater space to be made available for mitigation. Based on the current information available the Councils consider there are visual benefits in relation to the delivery of a GIS option when compared to an AIS option. The Councils also feel that as the projects are expected to stand completely independent of one other, each project should have a masterplan design in place in the event only one project is granted a DCO or implemented and the other is not.	The Outline Landscape Mitigation Plan (presented in the OLEMS submitted with this DCO application) presents a Rochdale Envelope scheme for an appropriate planting scheme that is designed to mitigate the effects of the projects. The DCO process will enable the Local Planning Authorities to sign-off the conditions of the DCO only when satisfied. The design of the Landscape Mitigation Plan can evolve and change when greater certainty regarding the project is obtained through detailed design post-consent.

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			This includes the potential adoption of a GIS NGET substation.
Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	It is also important that the masterplan takes into consideration the two potential National Grid Venture projects. At present the possible extensions to the National Grid substation in order to accommodate the National Grid Venture substation connections would involve the land currently shown to be utilised as a SuDs pond. Consideration would also need to be given to how additional cable routes and extensions to the National Grid substation would affect landscaping proposals.	The Applicant has reviewed those projects to be included in the cumulative impact assessment in line with PINS Advice Note 13 and currently there is insufficient information regarding the National Grid Ventures schemes to include them within the cumulative impact assessment. See ***Chapter 5 EIA Methodology*** for the methodology adopted for the cumulative impact assessment screening exercise.
Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	Appropriate building design and materials should be actively sought as part of the procurement process. The design should be such that it minimises visual impact and blends with the background and foreground as far as possible, with recessive colouring, and use of innovative solutions to further soften and moderate the impact.	Noted. The Applicant is committed to working with the Local Planning Authorities through the post-consent detailed design phase of the project to discharge the conditions of the DCO.
Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	It is essential that the size of the proposals should be minimised. The footprint of the substations and any ancillary buildings must be minimised to reduce the perceived bulk of the developments. The impact of low level visual clutter should be effectively minimised through design of layout, and landscaping. The amalgamation of any ancillary buildings should be fully explored. While it is accepted that the final design of the buildings will apply the use of Rochdale principles and thus be dealt with through Requirements, measures should be incorporated into the DCOs that ensure the design issues are reasonably prioritized over cost considerations.	The DCO process will enable the Local Planning Authorities to sign-off the conditions of the DCO only when satisfied. The design of substation infrastructure can evolve and change when greater certainty regarding the project is obtained through detailed design post-consent. This includes the ancillary buildings and perceived ‘visual clutter’.

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Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	Design should have regard to the potential for embedded ecological mitigation and enhancement (such as green & brown roofs, green walls, appropriate vegetation planting and bird nesting habitat). The design should also have regard to the need to minimise any adverse impacts on species and habitats, with particular attention to lighting, large areas of glass and baffling of noise sources.	The DCO process will enable the Local Planning Authorities to sign-off the conditions of the DCO only when satisfied. The design of substation infrastructure can evolve and change when greater certainty regarding the project is obtained through detailed design post-consent. This includes potential to embed ecological mitigation and enhancement.
Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	The substations should be an exemplar in terms of innovative renewable infrastructure substation design. This has shown to date in working constructively with the Councils to minimise the onshore impacts of these nationally significant infrastructure projects. The final design should be subject to design review either via the Design Council or Shape East.	The DCO process will enable the Local Planning Authorities to sign-off the conditions of the DCO only when satisfied. The design of substation infrastructure can evolve and change when greater certainty regarding the project is obtained through detailed design post-consent. This includes potential review by the Design Council or Shape East.
Suffolk County Council and Suffolk Coastal District Council	26/03/2019 Section 42 Consultation Response	The current consultation does not detail the use or extent of construction or operational site floodlighting, if this is to be used then further details should be provided; the location, height, design, sensors and luminance of all site floodlighting and the mitigation measures used will be necessary to; a) Limit obtrusive glare to nearby residential properties, b) Minimise sky-glow.	No operational site floodlighting is included for the East Anglia TWO or East Anglia ONE North substation. Lighting requirements include security lighting, repair lighting and motion-sensor car-park lighting as per ***section 6.7.8.14*** of this chapter.
Norfolk County Council	26/03/2019	There are wider grid connection issues in respect of the 400kV network which runs between Norfolk and Suffolk. It is considered that as part of any the DCO application and accompanying	The Applicant has reviewed those projects to be included in the cumulative impact assessment in line

Consultee	Date / Document	Comment	Response / where addressed in the ES
	Section 42 Consultation Response	Environmental Statement there needs to be clarification on whether there is likely to be any requirement in the wider area for either: (a) reinforcement of the existing 400 kV network; or (b) new overhead lines (400kV).	with PINS Advice Note 13 and currently there is insufficient information regarding addition requirements to reinforce the existing network or for new overhead lines. See ***Chapter 5 EIA Methodology*** for the methodology adopted for the cumulative impact assessment screening exercise.
Norfolk County Council	26/03/2019 Section 42 Consultation Response	Given the amount of electricity coming ashore from other offshore wind energy projects and the increased generation from Sizewell C, the DCO application and accompanying ES will need to address the in-combination impact on the 400kV transmission network in the wider strategic area i.e. including the potential for reinforcement and new lines in both Norfolk and Suffolk.	The Applicant has reviewed those projects to be included in the cumulative impact assessment in line with PINS Advice Note 13 and currently there is insufficient information regarding addition requirements to reinforce the existing network or for new overhead lines. See ***Chapter 5 EIA Methodology*** for the methodology adopted for the cumulative impact assessment screening exercise.
Eastern IFCA	12/03/2019 Section 42 Consultation Response	Eastern IFCA support the decision to use Horizontal Direction Drilling (HDD) at landfall as embedded mitigation to avoid impacts on sensitive intertidal habitats.	Noted.
Eastern IFCA	12/03/2019 Section 42 Consultation Response	Policy CAB1 of the East Marine Plans states, 'preference should be given to proposals for cable installation where the method of installation is burial' (HM Government, 2014). Eastern IFCA recognise a commitment by the Applicant to bury, as far as possible, the offshore export cables, thus minimizing the need for surface-laid cable protection and that extensive site selection work has been	Noted

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		undertaken to ensure the routing of the offshore cables avoids the geological Coralline Crag at Thorpeness, thereby avoiding impacts to this feature.	
Eastern IFCA	12/03/2019 Section 42 Consultation Response	Alternatives to burial, including concrete mattressing, rock placement, use of ground or sand bags, frond mattressing and/or the use of uradact or similar shells are not in keeping with Policy CAB1 of the East Marine Plans and Eastern IFCA recognise that the Applicant acknowledges cable burial as the best form of cable protection. Furthermore, the Applicant states that surface laying with rock protection will only be undertaken where physically necessary and that a detailed export cable installation study will be carried out pre-construction to inform on the potential for export cable burial throughout the offshore cable corridor however given the sandy nature of the sediment this is considered likely.	Cables will be buried as far as possible using techniques most suitable for the ground conditions in the particular installation area. In areas where cables are unable to be buried due to ground conditions or because of cable crossings, appropriate protection measures will be used which will be implemented through the Scour Protection and Cable Protection Plan
Eastern IFCA	12/03/2019 Section 42 Consultation Response	The Applicant has highlighted that at this stage parameters for any cable lengths or areas requiring any additional rock dumping or cable burial are unknown, however they estimate that repair and reburial of one array cable of up to 4km length every 5 years and repair and reburial of up to 300m of export cable less than once every 5 years. Every effort should be made to maximise the length of cables that are buried and maintain burial over time.	Noted.

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