East Anglia TWO Offshore Windfarm

Appendix 17.1

Infrastructure and Other Users Consultation Responses

Environmental Statement
Volume 3

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Glossary of Acronyms

GGOWL	Greater Gabbard Offshore Wind Ltd
GWFL	Galloper Wind Farm Ltd.
PEIR	Preliminary Environmental Information Report

Glossary of Terminology

Applicant	East Anglia TWO Limited.
Development area	The area comprising the Onshore Development Area and the Offshore Development Area
East Anglia TWO project	The proposed project consisting of up to 75 wind turbines, up to four offshore electrical platforms, up to one offshore operation and maintenance platform, inter-array cables, platform link cables, up to one construction 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.
Horizontal directional drilling (HDD)	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
Offshore cable corridor	This is the area which will contain the offshore export cables between offshore electrical platforms and transition bays located at landfall.
Offshore development area	The East Anglia TWO windfarm site and offshore cable corridor (up to Mean High Water Springs) (described as the 'order limits' within the Development Consent Order).
Offshore infrastructure	All of the offshore infrastructure including wind turbines, platforms, and cables.

17.1 Consultation Responses

17.1.1 Introduction

1. This appendix covers those statutory consultation responses that have been received as a response to the Scoping Report (2017), the Preliminary Environmental Information Report (PEIR) (2019).

2. Responses from stakeholders and regard given by the applicant have been captured in ***Table A17.2.1***.

Table A17.2.1 Consultation Responses Related to Chapter 17 Infrastructure and Other Users

Consultee	Date / Document	Comment	Response / where addressed in the PEI
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.			
EDF Energy	08/11/2017	Meeting to discuss offshore cable corridor with EDF Energy. EDF Energy provided comments on potential concerns relating to impacts on the Coralline Crag formation and sediment intake.	***Section 17.6*** of this chapter assesses potential impacts on EDF Energy infrastructure. Information also provided on how comments were considered in the development of the offshore cable corridor in ***Chapter 4 Site Selection***.
The Crown Estate	01/12/2017 Draft Agreement for Lease (AfL) Application	Initial draft of the East Anglia TWO export cable corridor sent to The Crown Estate for review. The Crown Estate responded with comments (01/12/2017) in relation to potentially important aggregate areas and seabed sterilisation with adjacent East Anglia ONE cable corridor.	Comments provided by The Crown Estate were incorporated into the development of the offshore cable corridor. Details on this are provided in ***Chapter 4 Site Selection and Assessment of Alternatives*** and discussed in ***section 17.3.3*** of this chapter.
The Planning Inspectorate	20/12/2017 Scoping Response	The inspectorate does not agree that cumulative impacts can be scoped out due to insufficient justification including an absence of detail of proposed mitigation measures.	Addressed in ***section 17.7*** of this chapter.
The Planning Inspectorate	20/12/2017 Scoping Response	The Inspectorate agrees that transboundary impacts be scoped out on the basis that an assessment of potential transboundary impacts will be provided in the 'cables assessment'. Cross-reference must be made within the telecommunications aspect chapter to the cables assessment report.	Impacts to transboundary assets (such as Concerto Seg N and Seg S are assessed alongside other assets within ***section 17.6***. Addressed in ***section 17.8*** of this chapter.
The Planning Inspectorate	20/12/2017 Scoping Response	The Scoping Report anticipates indirect impacts on the infrastructure assets of third parties, e.g. EDF Energy. The PEI should assess impacts including indirect ones to other existing infrastructure assets. A clear methodology should be	Addressed in ***section 17.6*** of this chapter.

Consultee	Date / Document	Comment	Response / where addressed in the PEI
		presented in the PEI to explain how the assessment has been carried out.	
The Planning Inspectorate	20/12/2017 Scoping Response	The Scoping Report states that the assessment will be based on existing data and information gathered through consultation. The precise nature of this data has not been described. The PEI should include a detailed description of the information used to inform the assessment at each stage of the assessment process.	Addressed in ***section 17.4.2*** of this chapter.
The Planning Inspectorate	20/12/2017 Scoping Response	Reference is made to consulting developers, operators and marine users in the 'vicinity' of the Proposed Development. The PEI should clearly set out the study area, which should be based on a zone of influence model to ensure that all potential impacts are assessed.	Addressed in ***section 17.3.1*** of this chapter.
Galloper Wind Farm Ltd. (GWFL)	19/12/2017 Scoping Response	To protect GWF assets, GWFL requires the following constraints to be built into both projects; SPR to maintain a minimum 50m separation between EA2 cables and the GWFL and Gabbard cables at the landfall where the cables are buried due to thermal constraints; GWFL requires 10m either side of the GWF onshore cables for access for maintenance and repair; GWFL requests that technical as built information is made available and delivered indicating cable design, trench design, GPS co-ordinates of assets, and nomenclature etc. GWFL will reciprocate and provide this information when available for the Galloper assets.	Discussions of crossing agreements have commenced and will continue throughout application, examination and post consent. A crossing agreement will be sought from Galloper Windfarm Limited (GWFL). Further work has been undertaken since Scoping to refine the landfall location. These changes now ensure that the GWFL cables are only crossed once (see ***Chapter 4 Site Selection and Alternatives***)
GWFL	19/12/2017 Scoping Response	The scoping proposals show cables will cross offshore. However, the location of the NGET substation is not named, and could potentially be in or around Leiston in the vicinity of GWFL assets. GWFL requests that the cable routes associated with both projects are designed such that the need to cross GWFL cables twice is absolutely avoided.	

Consultee	Date / Document	Comment	Response / where addressed in the PEI
GWFL	19/12/2017 Scoping Response	The position of any beach or sea anchors should also be considered in relation to the proximity of the GWFL cables. GWFL must be consulted on any beach or sea anchor that is placed within 300m of the GWF export cable.	
GWFL	19/12/2017 Scoping Response	There is one AoS for a shared offshore cable export route to EA1N and EA2. The figure shows that the EA cables will cross the Galloper cables within 10km of the shore. GWFL expects a formal cable crossing agreement between GWFL and applicable projects to be in place in advance of the DCO application being submitted. GWFL would welcome early consultation including the review of method statements in relation to this.	
Interoute	14/02/2018	Consultation with Interoute in relation to crossing and proximity agreements in relation to the Concerto Seg-S. Interoute provided information on the location and installation of the Concerto Seg-S cable to help inform the East Anglia TWO export cable development process.	Proximity and crossing agreements are currently being drafted for agreement with Interoute. Potential impacts upon sub-sea cables are discussed in ***section 17.6*** of this chapter.
The following comments were made in response to the PEIR and were taken into account in the production of this ES.			
EDF Energy	26/03/2019 Section 42 consultation response	Any development offshore, as ScottishPower Renewables need to demonstrate that physical compatibility of its projects would have no adverse effects on the future operations of Sizewell C. This needs careful investigation prior to submission of the applications. We would like to work with you to understand any potential impacts and develop a way forward that would not impact Sizewell C.	As outlined in ***sections 4.7.4.1.3 and 4.7.4.2.2*** of ***Chapter 4 Site Selection*** and illustrated in ***Figure 4.3,*** EDF Energy raised concerns in relation to potential impacts to an important geological formation (Coralline Crag) in the landfall area which resulted in the Applicant widening the offshore cable route to the south so that this formation could be avoided. Furthermore, an assessment of the offshore cable corridor and landfall selection (see ***Appendix 4.6***), using

Consultee	Date / Document	Comment	Response / where addressed in the PEI
			information provided by EDF was undertaken to investigate construction methodologies which would avoid physical impacts to the Coralline Crag. This study is summarised in ***section 4.8.2*** of ***Chapter 4 Site Selection*** and the results were used to inform landfall and nearshore engineering decisions which required refinement of the offshore cable corridor in the nearshore area. It is likely that the HDD pop-out location will be to the south of the outcrop of Coralline Crag (see ***section 17.6.1.2*** of this chapter and ***section 7.6.2.7*** of ***Chapter 7 Marine Geology, Oceanography and Physical Processes***). Hence, there will be no interruption of the circulatory sediment transport pathways between the coast and Sizewell Bank.
Verizon	26/03/2019 Section 42 response	The installation of the windfarm with associated turbines, array and export cables may represent a serious risk to our asset, the Ulysses 2 telecommunications cable, and we request a crossing and proximity agreement be negotiated in good faith between Scottish Power and Verizon should Verizon deem it necessary	Discussions between the Applicant and Verizon will continue post application and an appropriate cable crossing agreement will be reached.
Verizon	26/03/2019 Section 42 response	In order to be able to maintain the Ulysses 2 cable in the event of a fault or other remedial work being required, we request that turbines are installed at a distance no less than 750m from the Ulysses 2 cable to allow for safe access for repair vessels.	Noted, this will be used to inform the crossing agreements with Verizon at the detailed design phase.

Consultee	Date / Document	Comment	Response / where addressed in the PEI
Verizon	26/03/2019 Section 42 response	In order to be able to maintain the Ulysses 2 cable in the event of a fault or other remedial work being required, we request that any array and export cable crossings of the Ulysses 2 cable are kept to a minimum. If multiple cable crossings are deemed necessary we request that a distance of at least 500m is maintained between crossings of the Ulysses 2 cable in order that maintenance and repairs can be effected on the Ulysses 2 cable safely and efficiently.	
Verizon	26/03/2019 Section 42 response	If loss of safe access to the Ulysses 2 cable results in increased costs of operation and maintenance, then we would expect to be compensated accordingly by Scottish Power.	
Eastern IFCA	12/03/2019 Section 42 response	Careful site selection has ensured that interactions with other users will generally be avoided. Where interaction is unavoidable (such as cable crossings) commercial agreements would be put in place ahead of construction, to ensure that these interactions are safe and prevent damage to other infrastructure."	Discussions between the Applicant and owners of relevant infrastructure will continue post application and appropriate crossing and proximity agreements will be reached.
Greater Gabbard Offshore Wind Ltd (GGOWL)	26/03/2019 Section 42 response	SPR must demonstrate that any development proposals will not impact on the integrity and stability of GGOWL's infrastructure	***Chapter 4 Site Selection and Assessment of Alternatives*** **and** ***Chapter 6 Project Description*** demonstrate how other infrastructure constraints have been considered in the design of the project. Potential impacts with cables from Greater Gabbard are assessed discussed in ***section 17.6*** of this chapter.
GGOWL	26/03/2019 Section 42 response	GGOWL requires that SPR provide site layouts inclusive of wind turbine generator details and positions when available. This is to enable GGOWL to assess whether there will be any potential wake effects on Gabbard wind farm. If any concerns	The full response will be used to inform the proximity agreements with Greater Gabbard at the detailed design phase.

Consultee	Date / Document	Comment	Response / where addressed in the PEI
		are raised as a result of this assessment, GGOWL will require a hold harmless agreement to be agreed and put into force.	
GGOWL	26/03/2019 Section 42 response	It should be noted that there is potential for new offshore windfarms adjacent to the existing Galloper and Greater Gabbard offshore wind farms. GGOWL expects that Agreements for Lease will be offered by The Crown Estate for these sites in summer 2019. Although there is no certainty as to where the offshore cable routes and onshore infrastructure associated with these projects will be located there is potential for National Grid to offer either or both of these projects a connection point in the vicinity of Sizewell. EA1N and EA2 infrastructure should therefore be designed to minimise onshore land take and sterilisation of land which may be needed for these NSIPS in the future.	***Chapter 4 Site Selection and Assessment of Alternatives* and *Chapter 6 Project Description*** demonstrate how other infrastructure constraints have been considered in the design of the project. East Anglia TWO onshore order limits have been developed to minimise land take required. Details of onshore impacts to land use are provided in ***Chapter 21 Land Use***.
Hanson Aggregates Marine Ltd	26/03/2019 Section 42 response	Squeezing of Activities; Associated with displacement are the increased issues that will arise from the 'squeeze' and condensing of activities. The nature of these impacts are likely to be disproportionately harder to overcome for dredging operators concerned, including ourselves, because of the differences in comparative size/value of the projects.	There is an overlap of the offshore cable corridor with areas identified as potential aggregate resource, however the overlap is 0.9% of identified area of potential aggregate resource. See ***sections 17.3.3, 17.5.5, Figure 17.5*** of this chapter and ***Chapter 4 Site Selection Assessment of Alternatives* for further details**.
Hanson Aggregates Marine Ltd	26/03/2019 Section 42 response	Decommissioning; In line with the marine mineral safeguarding policies in the East Inshore/Offshore Marine Plans, (which reflect the requirements of the UK Marine Policy Statement) we consider it necessary for all infrastructure associated with the proposed development to be considered within the decommissioning programme for EA One and Two to take full and proper account of the potential for marine mineral resources to be permanently sterilised over the long term, as a consequence of leaving renewable	Noted. Decommissioning works would be determined by relevant legislation and guidance at the time of decommissioning. The offshore cable corridor has been developed to minimise sterilisation of the areas of potential aggregate resource. See ***sections 17.3.3, 17.5.5, Figure 17.5*** of this chapter and ***Chapter 4 Site Selection and Assessment of Alternatives* for further details**.

Consultee	Date / Document	Comment	Response / where addressed in the PEI
		energy infrastructure (particularly cables) in situ, once generation activities have concluded.	
GTT Communications (formally Interoute)	19/03/2019 Email communication	N/A	Correspondence and agreement to ongoing discussion for proximity/crossing agreement
CenturyLink (formally Level 3)	19/03/2019 Email communication	N/A	Correspondence and agreement to ongoing discussion for proximity/crossing agreement
Greater Gabbard OFTO Plc (now Equitix)	17/04/2019 Meeting	N/A	Meeting and agreement to ongoing discussion for proximity/crossing agreement
Galloper Wind Farm Ltd	19/03/2019 Email communication	N/A	Correspondence and agreement to ongoing discussion for proximity/crossing agreement
Interconnector	19/03/2019 Email communication	N/A	Correspondence and agreement to ongoing discussion for proximity/crossing agreement
Verizon Business	15/05//2019 Meeting	N/A	Meeting and agreement to ongoing discussion for proximity/crossing agreement