



**SCOTTISHPOWER
RENEWABLES**

East Anglia ONE North and East Anglia TWO Offshore Windfarms

Applicants' Responses to Examining Authority's Written Questions

Volume 9 - 1.7 Flood Risk, Water Quality and Resources

Applicants: East Anglia ONE North Limited and East Anglia TWO Limited
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Applicable to East Anglia ONE North and East Anglia TWO



Revision Summary				
Rev	Date	Prepared by	Checked by	Approved by
001	02/11/2020	Paolo Pizzolla	Lesley Jamieson / Ian Mackay	Rich Morris

Description of Revisions			
Rev	Page	Section	Description
001	n/a	n/a	Final for Deadline 1



This document is supported by the following appendices:

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2	East Anglia ONE Substation Detailed Design Document
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Glossary of Acronyms

AA	Appropriate Assessment
AADT	Annual Average Daily Traffic
ADD	Acoustic Deterrent Devices
AEOI	Adverse Effect on Integrity
AIL	Abnormal Indivisible Load
AIS	Air Insulated Switchgear
ALC	Agricultural Land Classification
ALO	Agricultural Liaison Officer
ANO	Air and Navigation Order
AONB	Area of Outstanding Natural Beauty
APP	Application Document
AST	Assured Shorthold Tenancies
ATC	Automatic Traffic Counts
BCT	Bat Conservation Trust
BEIS	Department of Business Energy and Industrial Strategy
BMV	Best and Most Versatile
BoR	Book of Reference
BT	British Telecom
CA	Compulsory Acquisition
CCS	Construction Consolidation Sites
Cd	Candela
CfD	Contract for Difference
CIA	Cumulative Impact Assessment
CIEEM	Chartered Institute of Ecology and Environmental Management
CION	Connection and Infrastructure Options Note
COCP	Code of Construction Practice
dB	Decibels
DCO	Development Consent Order
DML	Deemed Marine Licence
DMO	Destination Management Organisation
DMRB	Design Manual for Roads and Bridges
EA	Environment Agency
EIA	Environmental Impact Assessment
EM	Explanatory Memorandum
EMP	Ecological Management Plan
ES	Environmental Statement
ESC	East Suffolk Council
ESCA	European Subsea Cables Association
ESDAL	Electronic Service Delivery for Abnormal Loads
ETG	Expert Topic Group
ExA	Examining Authority
ExQs	Examining Authorities First Written Questions
FID	Final Investment Decision
FRA	Flood Risk Assessment
GEART	Guidelines for the Environmental Assessment of Road Traffic
GIS	Gas Insulated Switchgear
GLVIA	Guidelines for Landscape and Visual Impact Assessment
Ha	Hectares
HDD	Horizontal Directional Drilling
HE	Historic England



HGV	Heavy Goods Vehicle
HRA	Habitats Regulations Assessment
ICPC	International Cable Protection Committee
IPSIP	In Principle Site Integrity Plan
Km	Kilometres
kV	Kilovolt
LAT	Lowest Astronomical Tide
LCA	Landscape Character Assessment
LCT	Landscape Character Type
LiDAR	Light Detection and Ranging
LIQ	Land Interest Questionnaire
LLFA	Lead Local Flood Authority
LMP	Landscape Management Plan
LPA	Local Planning Authority
LSE	Likely Significant Effects
LVIA	Landscape and Visual Impact Assessment
M	Metres
MCA	Marine Coastguard Agency
MCTC	Manual Classified Turning Counts
MHWS	Mean High Water Springs
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
MoD	Ministry of Defence
MoU	Memorandum of Understanding
MW	Megawatt
MWh	Megawatt Hours
NALEP	The New Anglia Local Enterprise Partnership
NATS	National Air Traffic Service
NCTA	National Coastal Tourism Academy
NE	Natural England
NGET	National Grid Electricity Transmission
Nm	Nautical Miles
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
OAMP	Outline Access Management Plan
OCTMP	Outline Construction Traffic Management Plan
OFTO	Offshore Transmission Owner
OLEMS	Outline Landscape and Ecological Management Strategy
OMLP	Outline Management and Landscape Plan
ORJIP	Offshore Renewables Joint Industry Programme
OTP	Outline Travel Plan
PD	Procedural Decision
PEIR	Preliminary Environmental Impact Report
PEMP	Project Environmental Management Plan
PIL	Persons with an interest in Land
PPG	Planning Practice Guidance
PRoW	Public Right of Way
PS	Policy Statements
PTP	Port Travel plan
PVA	Population Viability Analysis
RAG	Red Amber Green
RLoS	Radar Line of Sight



RR	Relevant Representation
RSPB	Royal Society for the Protection of Birds
RTD	Red Throated Diver
RWS	Rijkswaterstaat
SAC	Special Area of Conservation
SCC	Suffolk County Council
SCCAS	Suffolk County Council Archaeology Service
SCHAONB	Suffolk Coats and Heaths Area of Outstanding Natural Beauty
SLVIA	Seascape, Landscape and Visual Impact Assessment
SMP	Shoreline Management Plan
SNS	Southern North Sea
SoCG	Statement of Common Ground
SoS	Secretary of State
SPA	Special protected Area
SPR	ScottishPower Renewables
SSSI	Site of Special Scientific Interest
STEM	Science, Technology and Engineering and Mathematics
SuDS	Sustainable Urban Drainage System
SZC	Sizewell C
TCE	The Crown Estate
TH	Trinity House
TMZ	Transponder Mandatory Zone
TP	Temporary Purchase
TPO	Tree Purchase Order
TWT	The Wildlife Trust
UK	United Kingdom
UKCP	United Kingdom Climate Projections
UXO	Unexploded Ordinance
VP	Viewpoint
WQ	Written Question
WR	Written Representation
WSI	Written Scheme of Investigation
ZTV	Zone of Theoretical Visibility



Glossary of Terminology

Applicants	East Anglia TWO Limited / 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.
Construction operation and maintenance platform	A fixed offshore structure required for construction, operation, and maintenance personnel and activities.
The Councils	East Suffolk Council and Suffolk County Council
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 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.
Generation Deemed Marine Licence (DML)	The deemed marine licence in respect of the generation assets set out within Schedule 13 of the draft DCO.
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 <i>in situ</i> 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 / 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 TWO / 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 TWO / 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.
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 / East Anglia ONE North 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 / 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 TWO / 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 TWO / East Anglia ONE North 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.
Transmission DML	The deemed marine licence in respect of the transmission assets set out within Schedule 14 of the draft DCO.



ExA. Question Ref.	Question addressed to	ExA. Question	Applicants' Response
1.7 Flood Risk, Water Quality and Resources			
1.7.1	EA	<div>1</div> <div>2</div> Flood Risk Assessment (FRA) Can you confirm that you are satisfied with the Applicant's general approach to the Flood Risk Assessment (FRA); in your response, please address the following matters: <ul style="list-style-type: none"> a) confirm that you are satisfied that the Applicant has applied appropriate climate change allowances to their assessment of flood risk; b) comment on SCC and ESC's view that "unless there is clear commitment to remove all impermeable areas of the proposed development by 2069 then a climate change allowance of 40% should have been factored into the assessment instead of 20%" (see Section 42 Consultation Response dated 27 March 2019 of Appendix 20.1 [APP-494]); c) comment on the appropriateness of the methods proposed for works on and/or near to Main Rivers located with the study area, including the Thorpeness Hundred River and Friston Watercourse; and d) comment on the adequacy and feasibility of the Applicant's proposed 'embedded' and residual mitigation measures detailed throughout the FRA [APP-496]. 	The Applicants would refer the ExA to matters agreed in the Statement of Common Ground (SoCG) (ExA.SoCG-3.D1.V2) between the Applicants and the Environment Agency. The Applicants refer to Agreement Statement EA-205 which is marked as agreed with regards to the FRA (Appendix 20.3 (APP-496)).
1.7.2	The Applicant	<div>1</div> <div>2</div> Main Rivers Can the Applicant comment on concerns raised at consultation [APP-494] that the Main River through Friston has not been adequately identified or assessed? The Applicant should explain whether any regulated flood risk activities are proposed to take place on and/or near to any Main Rivers within the Friston watercourse catchment and clarify any associated permitting	The Applicants' FRA (Appendix 20.3 (APP-496)) identifies that within the study area there are two Main Rivers, namely the Thorpeness Hundred River and Friston Watercourse. The assessment presented in Chapter 20 Water



ExA. Question Ref.	Question addressed to	ExA. Question	Applicants' Response
		requirements.	<p>Resources and Flood Risk (APP-068) has considered all parts of the Friston Watercourse catchment, from its source north of Friston to the downstream limit with the Long Reach (Alde Estuary). ES Figure 20.1 (APP-265) was updated after section 42 consultation to clarify the Main River extent.</p> <p>The Applicants note that a flood risk activity permit may be required from the Environment Agency for works at locations in, under, over or within 8m of the Thorpeness Hundred River and Friston Watercourse. The onshore substations and National Grid infrastructure are identified as being located within the catchment of the Friston Watercourse, detailed within section 20.5.1.1 of Chapter 20 Water Resources and Flood Risk (APP-068).</p>
1.7.3	The Applicant	<p>Permits</p> <p>Can the Applicant comment on the progress made to agree and secure any permitting requirements with the EA for flood risk activity, including noting any foreseeable reason for permits not being issued? If Letters of No Impediments have been issued or are</p>	<p>The Applicants refer to Agreement Statement EA-203 in the SoCG between the Applicants and the Environment Agency (ExA.SoCG-3.D1.V2).</p>



ExA. Question Ref.	Question addressed to	ExA. Question	Applicants' Response
		issued during the Examination, the ExA requests that these are also submitted into the examination library.	<p>Work No. 37 is within Flood Zone 3a & 3b, a functional floodplain. Until detailed assessment work and detailed design are undertaken, it is not possible to establish the precise nature of works required at Work No. 37, or in particular whether ground raising, re-profiling or construction of structures that may divert or affect flood waters will be required.</p> <p>The Applicants will consult the Environment Agency on the need for a Flood Risk Activity Permit for works within Work No. 37 prior to such works commencing. Such works are likely to be classified as 'essential infrastructure'.</p> <p>The Applicants and the Environment Agency agree that to address this matter the Applicants will undertake a FRA of works required within Work No. 37 as part of any future Environmental Permit application.</p> <p>The Applicants note that a flood risk activity permit may be required from the Environment Agency for works at locations in, under, over or within 8m of the Hundred River and Friston</p>



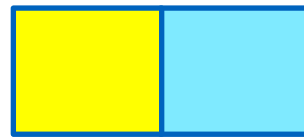
ExA. Question Ref.	Question addressed to	ExA. Question		Applicants' Response
		1	2	<p>Watercourse. The onshore substations and National Grid infrastructure are identified as being located within the catchment of the Friston Watercourse, detailed within section 20.5.1.1 of Chapter 20 Water Resources and Flood Risk (APP-068). The above points will be noted in an updated Outline Code of Construction Practice (CoCP) which will be submitted at Deadline 3.</p> <p>For clarity, the Applicants are not seeking letters of no impediment.</p>
1.7.4	The Applicant	1	2	<p>Flood Risk Assessment (FRA)</p> <p>The FRA was produced in October 2019. The ExA notes that the NPPG for the assessment of flood risk has been updated and revised in line with UK Climate Projections 2018 and a number of updates have been made to government guidance 'Flood Risk Assessments: Climate Change'. It is also noted that the EA flood risk maps for 'rivers and the sea in England and 'surface water in England' were updated in December 2019 whereas ES Chapter 20 refers to the 2012 flood zone maps.</p> <ul style="list-style-type: none"> Can the Applicant please explain what the implications of updated allowances/maps are for the assessment? The response should explain the extent to which any such updates would materially affect the conclusions reached in the FRA and ES. <p>The FRA in Appendix 20.3 (APP-496) was carried out in accordance with EN-1 Overarching National Policy Statement (NPS) for Energy, National Planning Policy Framework (NPPF) (Ministry of Housing, Communities & Local Government, 2019), Planning Practice Guidance (PPG) for Flood Risk and Coastal Change (Ministry of Housing, Communities & Local Government, 2014), and the Environment Agency's Climate Change Allowance guidance (Environment Agency, 2016), which were all</p>



ExA. Question Ref.	Question addressed to	ExA. Question	Applicants' Response
			<p>relevant at the time of the assessment and remain so.</p> <p>The reference to Environment Agency 2012 Flood Zone Maps in Chapter 20 Water Resources and Flood Risk (APP-068) is an error. Chapter 20 Water Resources and Flood Risk (APP-068) utilises the same Flood Zone information as the supporting FRA (Appendix 20.3 (APP-496)) and should be referenced as such. In the FRA it is noted that a data package was obtained from the Environment Agency in August 2018 and a review of the publicly available online Flood Zone information was also conducted. The then current version of the Flood Zone maps as well as those publicly available online at the time of the report (i.e. October 2019) were used within the assessment.</p> <p>The updated climate change guidance includes updated sea level rise allowances using UKCP18 projections, guidance on calculating flood storage compensation, how to use peak rainfall allowances to help design drainage systems and</p>



ExA. Question Ref.	Question addressed to	ExA. Question		Applicants' Response
		1	2	<p>clarification on how to apply peak river flow allowances so the approach is the same for both Flood Zones 2 and 3.</p> <p>None of the updates to this guidance materially change the values to be used in terms of future impacts relevant to the project, namely there has been no change to river flow allowances or rainfall values that would alter the assessment. As such, the conclusions of the assessment remain unchanged.</p>
1.7.5	The Applicant	1	2	<p>Flooding from the Sea</p> <p>Paragraph 53 of Appendix 20.3 ('Flooding from the Sea') states that the landfall location is located within Flood Zone 1, as defined by the EA online Flood Map for Planning, yet Flood Zone 1 is not depicted within Figure 20.3.1. To improve the clarity of the information can the Applicant provide a figure that shows the location of the Proposed Development in relation to Flood Zone 1.</p> <p>All areas in Figure 20.3.1 of Appendix 20.3 which are not demarked as Flood Zones 2 and 3 are Flood Zone 1. The Applicants have reproduced this figure with an asterisk in the legend to denote Flood Zone 1 (see Appendix 8 of this document).</p>
1.7.6	The Applicant/ Environment Agency	1	2	<p>Offsite Highway Improvements</p> <p>Do you consider that the omission of the offsite highway works and temporary laydown areas for structural works at Marlesford Bridge from the FRA meets the tests set out in NPS?</p> <p>The Applicants note that the requirement for, and extent of any works anticipated at Work No. 37, is unknown at this stage and subject to further inspections of the bridge and finalisation of the abnormal indivisible load (AIL) route. The</p>



ExA. Question Ref.	Question addressed to	ExA. Question	Applicants' Response
			<p>reason for not assessing water resources and flood risk impacts at Work No. 37 (Marlesford Bridge) is provided within section 20.3.1.1 of Chapter 20 Water Resources and Flood Risk (APP-068).</p> <p>An inspection of Marlesford Bridge is proposed to be undertaken post-consent. Results of an inspection will inform requirements for reinforcement / remediation works (if any), which will in turn inform the specification of the temporary laydown area. The draft DCO (APP-023) is not intended to authorise significant repair works on the Marlesford Bridge.</p> <p>As agreed with the Environment Agency during the SoCG discussions (EA-203 in (EA1N_EA2-DWF-ENV-REP-IBR-000876), the Applicants will undertake a FRA of works at Work No. 37 as part of the necessary Environmental Permit application for prescribed activities at Marlesford Bridge once the nature and scope of the works are established.</p>



ExA. Question Ref.	Question addressed to	ExA. Question		Applicants' Response
				Should the works be required, at this point, they will be assessed in accordance with relevant national policy (i.e. NPS EN-1, NPPF and the accompanying PPG).
1.7.7	The Applicant	1	2	<p>Marlesford bridge</p> <p>Can the Applicant confirm and indicate where it is secured that there is to be no building and/or land raising in relation to the offsite highway improvements at Marlesford Bridge. In answering this question, reference should be made to the nature and duration of works at this site.</p> <p>The Applicants refer to Agreement Statement EA-203 of the SoCG (ExA.SoCG-3.D1.V2) with the Environment Agency. The Applicants will undertake an FRA of works at Work No. 37 as part of the necessary Environmental Permit application for prescribed activities at Marlesford Bridge once the nature and scope of the works is established.</p>
1.7.8	The Applicant	1	2	<p>Foul drainage</p> <p>Has the Applicant sought confirmation from Anglian Water in relation to capacity being present in the main sewer to accommodate any required discharges from the project? If so, can the Applicant provide evidence from Anglian water that such capacity is available or provide an update on the matter should agreement not be provided to date.</p> <p>The Applicants have consulted with Anglian Water who advised of the process and recommended early engagement on any requirements for foul drainage. The Applicants have noted this advice and will engage with Anglian Water as soon as possible once its requirements for foul drainage are known. The preferred method for controlling foul waste would be determined during</p>



ExA. Question Ref.	Question addressed to	ExA. Question		Applicants' Response	
				detailed design. It should be noted that the anticipated number of visiting staff is expected to be low. The requirements in relation to this are therefore likely to be limited.	
1.7.9	SCC	1	2	Flooding incidents along East Suffolk Coastline The FRA states that the Level 1 SFRA reports a number of notable flooding incidents along the East Suffolk coastline. Can you confirm if any of the incidents affected the landfall location? The response should include details of such events including location, date and extent.	No response
1.7.10	SCC	1	2	Existing drainage patterns Please expand on the comments in your RR that the information within the FRA is not sufficient to determine how the proposed development would interact with existing drainage patterns. What information would you expect to see?	No response
1.7.11	SCC, ESC	1	2	Outline Code of Construction Practice (OCoCP) and Outline Landscape and Ecological Management Strategy (OLEMS) Are you satisfied that there is sufficient information in the OCoCP to satisfactorily secure the SWDP and Flood Management Plan and within the OLEMs to secure the final SuDs?	The purpose of the Outline CoCP (APP-578) is to outline the measures which will ensure compliance with relevant legislation and DCO requirements during construction of the Projects. Under Requirement 22 of the draft DCO (APP-023) the final CoCP must include a surface water and drainage management plan and a flood management plan, which must be approved as part of the CoCP by



ExA. Question Ref.	Question addressed to	ExA. Question		Applicants' Response
				<p>the relevant planning authority before works commence.</p> <p>The Operational Drainage Management Plan will address all operational drainage measures and confirm the final SuDS designs. An Outline Operational Drainage Management Plan and an update to the draft DCO (APP-023) to reflect the need for submission and approval of an Operational Drainage Management Plan will be submitted at Deadline 3. The amendment to the draft DCO (APP-023) will also provide that the Operational Drainage Management Plan must accord with the Outline Operational Drainage Management Plan. This is separate to the OLEMS (APP-584).</p>
1.7.12	The Applicant	1	2	<p>Sustainable Urban Drainage Systems</p> <p>How is the Applicant confident that the attenuation ponds can be accommodated within the order limits? What preliminary site investigations have taken place? Have any preliminary hydraulic calculations been calculated?</p> <p>The Applicants will submit an Outline Operational Drainage Management Plan at Deadline 3. This report will demonstrate that the attenuation ponds can be accommodated within the Order limits. Calculations were undertaken to confirm this and were based on precautionary methods and the worst-case scenario (in terms of</p>



ExA. Question Ref.	Question addressed to	ExA. Question		Applicants' Response	
				both climate change and rainfall events).	
1.7.13	The Applicant/SCC	1	2	<p>Adoption and maintenance</p> <p>Paragraph 5.7.10 of NPS EN-1 states that the DCO or any associated planning obligations should make provision for the adoption and maintenance of any SuDs, including any necessary access rights to the property. It does not appear that such details have been included with the application.</p> <p>a) Do you take responsibility for maintaining the drainage for the lifetime of development and if so how is this secured and enforceable through the DCO?</p> <p>b) What would be the council's preferred adoption arrangements?</p>	The Applicants have committed to maintaining the Projects' site drainage system during the operation phase of the Projects. This is outlined in the Outline Operational Drainage Management Plan, which the Applicants will submit at Deadline 3. A new requirement will be included in the draft DCO (APP-023) which requires the Operational Drainage Management Plan to be submitted to and approved by the relevant planning authority. This requirement will also provide that the Operational Drainage Management Plan must accord with the Outline Operational Drainage Management Plan, and be implemented as approved.
1.7.14	EA	1	2	<p>Water Framework Directive (WFD)</p> <p>Can the Environment Agency confirm whether or not it agrees that the Water Framework Directive information provided in the application appropriately demonstrates the Proposed Development's compliance with the requirements of the Water Framework Directive? Please comment on the Applicant's comments in Table A20.42 [APP-036]. Do any other matters relevant to Water Framework Directive need to be taken into account?</p>	The Applicants refer to Agreement Statement EA-212 in the Applicants' SoCG (ExA.SoCG-3.D1.V2) with the EA.



ExA. Question Ref.	Question addressed to	ExA. Question		Applicants' Response
1.7.15	EA	1	2	<p>WFD</p> <p>The Applicant has confirmed that an assessment of migratory fish and river connectivity was not undertaken. The Applicant has now said that it will commit to pre-construction surveys on fish and eels within an updated OLEMs. Are you satisfied that this is sufficient to allay your concerns raised in relation to the Water Framework Directive compliance assessment and Table A20.42?</p>
1.7.16	The Applicant	1	2	<p>Friston</p> <p>Several RRs express concerns relating to recent flooding events in Friston.</p> <ul style="list-style-type: none"> a) Has any work been undertaken to identify drains within the site? b) What assessment has been made of the tributaries and drains in this vicinity, and how is it proposed to ensure that the construction and operation of the substation and associated infrastructure does not worsen the flooding in this area?

The Applicants refer to Agreement Statement EA-304 in the Applicants' SoCG (ExA.SoCG-3.D1.V2) with the EA.

The existing hydrological context of Friston is discussed in the Applicants' Outline Operational Drainage Management Plan which is due to be submitted at Deadline 3. This includes consideration of existing drains on site and drainage off site via tributaries.

Embedded mitigation in relation to surface water runoff and flood risk is presented within **section 20.3.3** and **Table 20.3** of **Chapter 20 Water Resources and Flood Risk** (APP-068). Issues pertinent to construction phase drainage, including consideration of surface water runoff, will be managed through the implementation of the CoCP which must accord with the **Outline CoCP** (APP-578) which will be re-submitted at Deadline 3.



ExA. Question Ref.	Question addressed to	ExA. Question	Applicants' Response
			<p>An Operational Drainage Management Plan will be prepared and submitted to the local planning authority post-consent. The submission and approval of the Operational Drainage Management Plan will be secured through a new requirement which will be added to the draft DCO (APP-023). The Operational Drainage Management Plan will secure measures which limit discharges to a controlled rate (equivalent to the greenfield runoff rate) and ensure that any redirected overland flow routes do not cause an increase in off site flood risk. The Applicants will submit an Outline Operational Drainage Management Plan at Deadline 3.</p> <p>The Applicants refer to Agreement Statement LA-06 in the Applicants SoCG (ExA.SoCG-2.D1.V2) with the Councils. Flood events in the Friston area, resulting from overland flow, that occurred during late 2019 – early 2020 was a result of multiple flow paths and not a direct result of surface water runoff from land associated with the proposed site of</p>



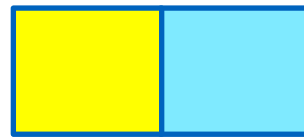
ExA. Question Ref.	Question addressed to	ExA. Question		Applicants' Response	
				the onshore substation or the National Grid infrastructure.	
1.7.17	EA	1	2	Secondary Aquifers In your RR [RR-039] you suggest that Table 20.12 of ES Chapter 20 could include reference to secondary aquifers supporting private supply. In the Applicant's response [AS-036] it is stated that that a reference to secondary aquifers supporting private supply could be included in Table 20.12 but that this would make no material difference to the impact assessment. Do you agree?	No response
1.7.18	The Applicant/EA	1	2	Groundwater dependant ecological sites Please provide an update on outstanding matters still under discussion.	The Applicants refer to Agreement Statement EA-205 in the Applicants' SoCG with the Environment Agency (ExA.SoCG-3.D1.V2).
1.7.19	EA	1	2	Watercourse crossing method statement In your RR [RR-039] you requested that a control measure to avoid coarse fish spawning season (March to June) should be included and addressed as part of the watercourse crossing method statement. Please comment on the Applicant's response that they will seek to avoid this season rather than avoid. Should this be secured in the dDCO?	No response
1.7.20	East Suffolk Drainage Board	1	2	Impact Assessment Methodology The SoCG [AS-049] states that the impact assessment methodologies used for ES Chapter 20 are not agreed. Please can you provide further details on your concerns relating to the impact assessment methodologies?	The Applicants refer to Agreement Statement IDB-003 in the Applicants' SoCG (ExA.SoCG-4.D1.V2) with the East Suffolk Internal Drainage Board, where this is agreed.



ExA. Question Ref.	Question addressed to	ExA. Question		Applicants' Response
1.7.21	The Applicant	1	2	<p>National Flood and Coastal Erosion Risk Management Strategy for England</p> <p>The above strategy was published in July 2020. Can the Applicant please explain what, if any, implications the publication has for the application? The response should explain the extent to which any such updates would materially affect the conclusions reached in the FRA and ES.</p> <p>The Applicant notes the publication of the updated National Flood and Coastal Erosion Risk Management Strategy for England in July 2020, and also that this was formally adopted on 25 September 2020 with supporting documents uploaded to the government online portal.</p> <p>The updated Strategy sets out the long-term delivery objectives for the next 10 to 30 years, but also includes shorter term, practical measures that Risk Management Authorities (RMA) should take working with partners and communities. It is important to note that this has been recently adopted and, as a framework document, it will take some time for RMAs to translate this into their own local policy and guidance before ensuring its practical delivery within communities and with other interested parties.</p> <p>However, the principles of the updated Strategy focus on climate resilience and, within the context of this Project, ensuring that infrastructure is resilient to future</p>



ExA. Question Ref.	Question addressed to	ExA. Question	Applicants' Response
			<p>flooding and how this will be delivered by all parties.</p> <p>The principles of climate resilience etc. are not new to the updated Strategy, rather they have been reviewed and refined. As such these are already fundamental factors that are considered within the FRA (Appendix 20.3 (APP-496)) and Chapter 20 Water Resources and Flood Risk (APP-068). As a Nationally Significant Infrastructure Project, it is important to ensure that the design of the project is resilient to future flood risk and coastal erosion. This has been considered within both the FRA and the ES Chapter 20 (APP-068) using current guidance including the current Environment Agency guidance on climate change, which is based on UKCP18 and LLFA guidance / requirements related to drainage.</p> <p>On this basis, while the updated Strategy provides guidance and a revised focus on flood risk and coastal erosion, the guiding principles contained within it, in relation to climate resilience for</p>



ExA. Question Ref.	Question addressed to	ExA. Question	Applicants' Response
			infrastructure into the future, are already fundamental considerations within the FRA (Appendix 20.3 (APP-496)) and Chapter 20 Water Resources and Flood Risk (APP-068). It is therefore the Applicants' view that the updated Strategy does not materially affect the conclusions reached in the FRA (APP-496) and ES (APP-068).