East Anglia ONE North Offshore Windfarm

Statement of Engagement

Applicant: East Anglia ONE North Limited
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Glossary of Acronyms

CoCP	Code of Construction Practice
DCO	Development Consent Order
ES	Environmental Statement
HDD	Horizontal directional drilling
NSIP	Nationally Significant Infrastructure Project

Glossary of Terminology

Applicant	East Anglia ONE North Limited.
Cable sealing end compound	A compound which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Cable sealing end (with circuit breaker) compound	A compound (which includes a circuit breaker) which allows the safe transition of cables between the overhead lines and underground cables which connect to the National Grid substation.
Construction consolidation sites	Compounds associated with the onshore works which may include elements such as hard standings, lay down and storage areas for construction materials and equipment, areas for vehicular parking, welfare facilities, wheel washing facilities, workshop facilities and temporary fencing or other means of enclosure.
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 ONE North project	The proposed project consisting of up to 67 wind turbines, up to four offshore electrical platforms, up to one construction, operation and maintenance platform, inter-array cables, platform link cables, up to one operational meteorological mast, up to two offshore export cables, fibre optic cables, landfall infrastructure, onshore cables and ducts, onshore substation, and National Grid infrastructure.
East Anglia ONE North windfarm site	The offshore area within which wind turbines and offshore platforms will be located.
European site	Sites designated for nature conservation under the Habitats Directive and Birds Directive, as defined in regulation 8 of the Conservation of Habitats and Species Regulations 2017 and regulation 18 of the Conservation of Offshore Marine Habitats and Species Regulations 2017. These include candidate Special Areas of Conservation, Sites of Community Importance, Special Areas of Conservation and Special Protection Areas.
Evidence Plan Process (EPP)	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and the information required to support HRA.
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 ONE North project Development Consent Order but will be National Grid owned assets.
National Grid overhead line realignment works	Works required to upgrade the existing electricity pylons and overhead lines (including cable sealing end compounds and cable sealing end (with circuit breaker) compound) to transport electricity from the National Grid substation to the national electricity grid.
National Grid overhead line realignment works area	The proposed area for National Grid overhead line realignment works.
National Grid substation	The substation (including all of the electrical equipment within it) necessary to connect the electricity generated by the proposed East Anglia ONE North project to the national electricity grid which will be owned by National Grid but is being consented as part of the proposed East Anglia ONE North project Development Consent Order.

National Grid substation location	The proposed location of the National Grid substation.
Natura 2000 site	A site forming part of the network of sites made up of Special Areas of Conservation and Special Protection Areas designated respectively under the Habitats Directive and Birds Directive.
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 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 ONE North project from landfall to the connection to the national electricity grid.

Onshore preparation works	Activities to be undertaken prior to formal commencement of onshore construction such as pre–planting of landscaping works, archaeological investigations, environmental and engineering surveys, diversion and laying of services, and highway alterations.
Onshore substation	The East Anglia ONE North substation and all of the electrical equipment within the onshore subsation and connecting to the National Grid infrastructure.
Onshore substation location	The proposed location of the onshore substation for the proposed East Anglia ONE North project.
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.

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Statement of Engagement

1 Summary

1. East Anglia ONE North Limited (the "Applicant") is planning to develop the East Anglia ONE North Offshore Windfarm (the "Project") consisting of an offshore generating station, located approximately 36km from the port of Lowestoft and 42km from Southwold and covering an area of approximately 208km^2, together with associated development to connect the generating station to the national grid.

2. The Project will, amongst other things, comprise of up to 67 wind turbines, up to four offshore electrical platforms, up to one offshore construction, operation and maintenance platform and up to one offshore meteorological mast.

3. The total installed electricity generating capacity of the Project will exceed 100 MW and the Project is therefore considered to be a Nationally Significant Infrastructure Project ("NSIP") under the 2008 Act. The Project also comprises a second NSIP, namely, National Grid overhead line realignment works in order for electricity generated by the offshore wind farm to be connected to the national electricity grid. The Applicant is therefore submitting an application to the Secretary of State under Section 37 of the Planning Act 2008 for a Development Consent Order ("DCO") for the construction, operation, maintenance and decommissioning of the Project.

4. This Statement of Engagement has been prepared in accordance with Regulation 5(2)(f) of the Infrastructure Planning (Applications: Prescribed Forms and Procedures) Regulations 2009 (the "APFP Regulations") which requires the applicant for a DCO to provide a statement as to whether the application engages Section 79(1) *(Statutory nuisances and inspections therefor)* of the Environmental Protection Act 1990.

5. This Statement explains that, whilst it is not expected that the construction, operation, maintenance or decommissioning of the Project would engage Section 79(1) by causing statutory nuisances, the draft DCO (Document reference 3.1) that accompanies the Application contains a provision at Article 7 (*Defence to proceedings in respect of statutory nuisance*) to provide a defence to proceedings for statutory nuisance, should they be initiated against the Applicant (or its successors) as undertakers of the Project.

6. The Environmental Statement ("ES") (Document reference 6.1) which has been prepared by the Applicant as part of the process of environmental impact assessment for the Application has analysed the potential significant effects of a number of elements specified in Section 79(1).

7. The main potential for the Project to cause statutory nuisance would be onshore noise during the construction of the Project and noise emitted from the new onshore substation during operation. However, the conclusion that the Applicant has drawn from the ES is that, with the implementation of mitigation measures where appropriate (which will be secured by Requirements attached to the DCO), claims for statutory nuisance are unlikely to arise from the Project.

2 Statement of Engagement

8. Regulation 5(2)(f) requires the applicant for a DCO to state whether the proposal engages one or more of the matters set out in Section 79(1) *(Statutory nuisances and inspections therefor)* of the Environmental Protection Act 1990. If so, the applicant is required to indicate how it proposes to mitigate or limit such nuisances.

9. Section 79(1) deals with the following matters:

   a) any premises in such a state as to be prejudicial to health or a nuisance;

   b) smoke emitted from premises so as to be prejudicial to health or a nuisance;

   c) fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;

   d) any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;

   e) any accumulation or deposit which is prejudicial to health or a nuisance;

   f) any animal kept in such a place or manner as to be prejudicial to health or a nuisance;

   fa) any insects emanating from relevant industrial, trade or business premises and being prejudicial to health or a nuisance;

   fb) artificial light emitted from premises so as to be prejudicial to health or a nuisance;

   g) noise emitted from premises so as to be prejudicial to health or a nuisance;

   ga) noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street; and

   h) any other matter declared by any enactment to be a statutory nuisance.

10. It is considered that the Project has the potential to give rise to complaints from receptors under sub-paragraphs (g) and (ga) under Section 79(1) in relation to noise. This Statement also considers air quality (sub-paragraph (d)) and lighting (sub-paragraph (fb)).

11. Whilst the conclusions of the ES suggest that no such nuisance will occur, the Applicant has included within the draft DCO at Article 7 a provision which would protect the Applicant or its successors as undertakers operating the Project from any proceedings for statutory nuisance.

3 Noise and Vibration

12. The likely noise and vibration effects from construction, operation, maintenance and decommissioning of the onshore elements of the Project have been predicted and assessed in accordance with the appropriate legislation and guidance. Survey data has been utilised to determine the baseline noise levels at locations representative of the potentially most affected noise sensitive receptors.

Construction

13. Potential impacts from noise and vibration were identified as arising from construction works (and the associated construction traffic) in a small number of locations. Effects will however be reduced to no greater than minor due to a range of industry standard mitigation measures including the preparation of a Code of Construction Practice ("CoCP") which will include a Construction Phase Noise and Vibration Management Plan (secured by Requirement 22) and where appropriate, the use of site specific solutions such as the use of screening (i.e. temporary noise barriers and/or temporary spoil bunds).

Operation

14. During the operation of the Project, noise impacts are expected to be limited to the operational noise of the onshore substation. The operational noise emissions from the onshore substation will be governed by noise limits secured by Requirements 26 and 27 of the draft DCO. These requirements will result in a negligible effect on receptors.

15. Industry standard noise mitigation measures (including consideration of design) around the onshore substation will ensure that noise emissions from the onshore substation do not exceed the levels stated in the noise requirement.

16. The assumption has been made in the ES that there would be no noise impacts from the proposed onshore cable route or landfall during operation.

Decommissioning

17. No decision has been made regarding the final decommissioning policy for the onshore infrastructure as it is recognised that industry best practice, rules and legislation change over time. The onshore substation will likely be removed and be reused or recycled. It is anticipated that the onshore cable would be decommissioned (de-energised) and either the cables, jointing bays and transition bays left in situ or removed depending on the requirements of the onshore decommissioning plans approved by the local planning authority in accordance with Requirement 30 of the draft DCO. The detail and scope of the decommissioning works will be determined by the relevant legislation and guidance at the time of decommissioning and agreed with the regulator.

18. Where the onshore cables are decommissioned (de-energised) and the cables, jointing pits and transition bays are left in-situ there would be no impact for any receptor upon decommissioning. Where onshore infrastructure is removed the impacts to receptors would be similar to, but likely be of lower magnitude than those described for construction.

19. The noise levels from decommissioning of the onshore substation and National Grid substation are difficult to predict as they would contain high but very transient noise levels from demolition works. More continuous noise levels from plant onsite would not be considered to be higher than those predicted for construction works.

20. The mitigation measures outlined for the construction of the onshore cable route, onshore substation and National Grid substation for the control of noise would therefore also be expected to be adopted for the decommissioning phase. Requirement 30 states that within six months following the cessation of commercial operation of the transmission works and grid connection works, onshore decommissioning plans must be submitted to and approved by the relevant planning authority and the onshore decommissioning plans must be implemented as approved.

Offshore

21. The Applicant considers that none of the matters specified in Section 79(1) are engaged by the offshore elements of the Project, principally because the Project is located in the North Sea approximately 36km from the Suffolk coast.

4 Air Quality

22. Onshore construction activities such as soil stripping, plant movement, materials storage and stockpiling, transport of materials and topsoil reinstatement may lead to dust emissions, and construction traffic on the local road network may lead to emissions of exhaust pollutants. However, due to the temporary nature of the works and the proposed control measures including the production of an Air Quality Management Plan as part of the Code of Construction Practice (secured by Requirement 22 of the draft DCO), the potential impacts are considered to be not significant and are not expected to engage Section 79(1).

5 Lighting

Onshore

23. During the construction phase, some temporary lighting would be required within the onshore development area. Along the length of the onshore cable route, no 24-hour lighting is anticipated to be required except that associated with horizontal directional drilling ("HDD") operations and security lighting at the construction consolidation sites. Task lighting will be utilised in localised areas where required. At the onshore substation and National Grid substation it has been assumed as a worst case scenario that some periods of 24 hour construction may be required, for which task related flood lighting may be necessary.

24. During operation of the onshore substation and National Grid substation, lighting requirements may entail:

- Security lighting around perimeter fence of compound, to allow CCTV coverage, possibly motion sensitive;
- Car park lighting – as per standard car park lighting, possibly motion sensitive; and
- Repair / maintenance – task related flood lighting may be necessary; and
- Inspection lighting – on demand lighting to provide adequate lighting for access and inspection of equipment.

25. Requirement 22 of the draft DCO requires an Artificial Light Emissions Management Plan to be submitted for approval by the relevant planning authority as part of the Code of Construction Practice. This plan will provide details of external lighting during construction.

26. Requirement 25 of the draft DCO requires Operational Artificial Light Emissions Management Plans to be submitted for approval by the relevant planning authority in relation to the onshore substation and the National Grid substation. These plans will provide details of external lighting at the substations during the operational period.

27. The impacts of onshore lighting are considered to be not significant; therefore they are not expected to engage Section 79(1).

Offshore

28. The windfarm is approximately 36km offshore and at this distance the turbines and any navigation lighting are considered to be sufficiently far offshore not to engage Section 79(1).

6 Conclusions

29. The Applicant has designed the Project in such a way as to minimise the environmental effects of the Project and has also included a variety of measures to mitigate any remaining impacts further still.

30. These measures are secured by the requirements contained in Part 3 of Schedule 1 to the draft DCO, which cover a number of relevant matters including:

- A Code of Construction Practice in relation to onshore works, covering a wide range of matters (Requirement 22), including:
  - (i) a Construction Phase Noise and Vibration Management Plan;
  - (ii) an Air Quality Management Plan; and
  - (iii) an Artificial Light Emissions Management Plan.
- Limits on onshore construction hours (Requirements 23 and 24);
- Limits on operational noise arising from the onshore substation, as measured at specific residential locations (Requirements 26 and 27); and

31. Control on lighting during operation of the onshore substations through the submission and approval of Operational Artificial Light Emissions Management Plans in respect of the onshore substation and the National Grid substation (Requirement 25).

32. In relation to the offshore works, the noise and vibration effects on human receptors during the construction, operation and decommissioning phases of the Project are considered sufficiently small to be well within accepted standards and as a result no further mitigation is deemed necessary.

33. Notwithstanding the above conclusion, the draft DCO that accompanies the Application contains a provision at Article 7 *(Defence to proceedings in respect of statutory nuisance)* that would provide a defence to proceedings for statutory nuisance should they be initiated against the Applicant or its successors as undertakers under the terms of the DCO. Given the Project's status as nationally significant infrastructure it is appropriate that the Project is protected from proceedings under Section 79 of the Environmental Protection Act 1990 and is capable of construction and subsequent continued operation.

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