



**SCOTTISHPOWER
RENEWABLES**

East Anglia ONE North and East Anglia TWO Offshore Windfarms

Construction in Proximity to Properties

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



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Glossary of Acronyms

DCO	Development Consent Order
CoCP	Code of Construction Practice
HDD	Horizontal Directional Drilling
OCTMP	Outline Construction Traffic Management Plan
OPRoWS	Outline Public Rights of Way Strategy
PRoW	Public Rights of Way
SSSI	Site of Special Scientific Interest
SPA	Special Protection Area



Glossary of Terminology

Applicants	East Anglia TWO Limited / East Anglia ONE North Limited.
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.
Horizontal directional drilling (HDD)	A method of cable installation where the cable is drilled beneath a feature without the need for trenching.
Landfall	The area (from Mean Low Water Springs) where the offshore export cables would make contact with land, and connect to the onshore cables.
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.



1 Construction in Proximity to Properties

1.1 Introduction

1. The purpose of this note is to provide information on the onshore construction works associated with the onshore cable route and landfall for the East Anglia ONE North project and the East Anglia TWO project ('the Projects') which may occur in proximity to residential properties, as well as to address representations raised by Interested Parties regarding the mitigation of impacts on properties during construction.
2. **Sections 1.2 to 1.7** below provide information on the approach to construction works, timings, associated mitigation, accesses and communication during construction at the landfall and along the onshore cable route.
3. This document is applicable to both the East Anglia ONE North and East Anglia TWO Development Consent Order (DCO) Applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's procedural decisions on document management of 23rd December 2019 (PD-004). Whilst this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it for the other project submission.

1.2 Approach to Construction

4. As outlined in the **Project Update Note** submitted at Deadline 2 (REP2-007), East Anglia ONE North Limited and East Anglia TWO Limited ('the Applicants') have confirmed that should both the Projects be consented and then built sequentially, when the first project goes into construction, the ducting for the second project will be installed along the whole of the onshore cable route in parallel with the installation of the onshore cables for the first project.
5. By making this commitment, there will no longer be a scenario whereby the Projects are constructed completely independent of each other along the onshore cable route. As a result, the duration of construction works along the onshore cable route and at the landfall for the second project has been reduced and therefore the potential for impacts on properties in proximity to the construction works is also reduced, particularly with regards to noise, air quality and access. The detail of these programme changes is reflected in the revised **Appendix 6.4 East Anglia TWO and East Anglia ONE North Cumulative Project Descriptions** (an updated version has been submitted at Deadline 3, document reference 6.3.6.4) and the **Onshore Cable Route Works Programme**

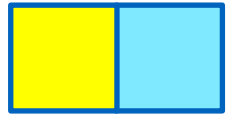


Clarification Note submitted at Deadline 3 (document reference ExA.AS-10.D3.V1). Summary information is presented in **Section 1.3**, below.

6. Horizontal Directional Drilling (HDD) will be used at Work No. 8 at the landfall (as discussed in the **Outline Landfall Construction Method Statement** (REP1-042)), and either an open trench or trenchless technique used when crossing the Sandlings Special Protection Area (SPA) / Leiston – Aldeburgh Site of Special Scientific Interest (SSSI) at Work Nos. 11, 12 and 13 (as discussed in the **Outline SPA Crossing Method Statement** (REP1-043)). As detailed in the **Onshore Crossing Schedule** (REP1-091), all other crossings will be crossed using an open trench technique where possible. The remainder of the onshore cable route will be open trenched.

1.3 Construction Timings

7. As detailed in **section 3.1** of the **Outline Code of Construction Practice** (CoCP) (an updated version has been submitted at Deadline 3, document reference 8.1), onshore working hours (and exceptions to these) are specified under the requirements of the **draft DCO** (an updated version has been submitted at Deadline 3, document reference 3.1). Onshore construction activities would normally be conducted during working hours of 7am to 7pm Monday to Friday and 7am to 1pm on Saturdays, with no construction works on Sundays or bank holidays. Construction works may occur outside the above times in relation to essential activities such as drilling during the operation of a trenchless technique and concrete pouring. However, the timing and duration of such works must be approved by the relevant planning authority in advance, as specified within the **draft DCO** (document reference 3.1).
8. Where works are undertaken outside of the construction hours specified within the **draft DCO** (document reference 3.1) in response to emergency situations, the relevant planning authority will be advised as soon as practicable, outlining the circumstances for the works, the likely duration and the management and mitigation measures implemented.
9. The relevant planning authority will be advised of the likely timetable of works. This timetable will also be shared with affected communities through the local community liaison officer.
10. As mentioned above, and outlined in the **Onshore Cable Route Works Programme Clarification Note** (document reference ExA.AS-10.D3.V1), as a result of the Applicants' commitment that should both the East Anglia ONE North project and the East Anglia TWO project be consented and then built sequentially, when the first project goes into construction, the ducting for the second project will be installed along the whole of the onshore cable route in parallel with the installation of the onshore cables for the first project. The duration of construction



works for the second project would therefore be reduced. Details on the indicative timescales of the construction works at the landfall and along the onshore cable route are as follows:

- Landfall: Sequential construction: 16 months for construction of landfall (including HDD) for first project and installation of ducts for second project, plus six months reinstatement. Followed at a later date by four months for completion of the landfall for second project, plus four months reinstatement.
 - Onshore Cable Route: Sequential construction: 24 months for construction of onshore cable route for first project and installation of onshore cable ducts for second project, plus six months for commissioning and reinstatement. Followed at a later date by 12 months for completion of the onshore cable route for second project, plus six months for commissioning and reinstatement.
11. The detail of these programme changes is reflected in the revised **Appendix 6.4 East Anglia TWO and East Anglia ONE North Cumulative Project Descriptions** (document reference 6.3.6.4). In summary, at the landfall the construction works are reduced from 24 months (i.e. 12 months twice) to 20 months (plus reinstatement) and for the entire cable route from 48 months (i.e. 24 months twice) (plus reinstatement) to 36 months (plus reinstatement). For further detail on the onshore cable route works, see also **Onshore Cable Route Works Programme Clarification Note** submitted at Deadline 3 (document reference ExA.AS-10.D3.V1)
- 1.4 Mitigation**
12. **Section 5.2** of the **Outline Landfall Construction Method Statement** (REP1-042) details the methodology to be used, as well as the set up activities required for the HDD works to commence at landfall.
13. **Section 9** of the **Outline CoCP** (document reference 8.1) outlines that there is the potential for noise to be generated during the construction process, from heavy plant and machinery for example. As identified in **Chapter 25 Noise and Vibration** (APP-073), measures will be implemented on site to minimise any effects and a programme of monitoring may be required. These control measures are detailed in **section 9.1** of the **Outline CoCP**, and a Construction Phase Noise and Vibration Management Plan, forming part of the final CoCP, will be submitted to and approved by the relevant planning authority prior to the commencement of any stage of the onshore works.
14. One such potential control measure is the use of noise / dust barrier / acoustic screens at selected locations. As detailed in **section 5.2** of the **Outline Landfall**



Construction Method Statement (REP1-042), activities undertaken prior to the commencement of the HDD works at the landfall will include installation of security fencing or other means of enclosure in line with the details approved under Requirement 17 of the **draft DCO** (document reference 3.1). Consideration will be given to the use of appropriately coloured wooden hoarding where views of the fencing and landfall construction area are visible from Public Rights of Way (PRoW). This fencing may also assist in reducing noise impacts arising from construction activities, acting as an acoustic barrier, maintaining suspended particles to suitable levels (the provision of solid screens or barriers around dusty activities, or at the site boundary, that are at least as high as any stockpiles on site acting as a dust management measure), whilst also providing visual screening for local properties.

15. As embedded mitigation, jointing bays will not be constructed within 55m of a residential dwelling (as secured by Requirement 12(15) of the **draft DCO** (document reference 3.1)). This is designed as noise mitigation and will be especially beneficial in the sequential construction scenario, given that the jointing bays will be the locations where construction activity would be focussed (i.e. excavation and construction of jointing bays themselves and cable pulling).
16. Other examples of control measures as a result of construction activities are provided in the **Outline CoCP** (document reference 8.1) as follows:
 - **Section 5** Pollution Prevention and Response;
 - **Section 6** Contaminated Land and Groundwater (including Materials Management);
 - **Section 7** Waste Management;
 - **Section 8** Soil Management;
 - **Section 9** Noise and Vibration Management;
 - **Section 10** Air Quality Management (including Dust Management); and
 - **Section 11** Surface Water and Drainage Management.
17. All control measures detailed in the **Outline CoCP** will form part of the final CoCP, which will be submitted to and approved by the relevant planning authority.
18. In addition, there will be regular communication with site neighbours to inform them of the construction schedule, and when construction activities are likely to occur (see **section 1.7**, below).

1.5 Access

19. Free or managed access will be maintained at all time for properties and businesses. There will be temporary roadworks associated with off-site highway



works, highway access construction or cable crossings which will require short-term traffic management (e.g. traffic signals, diversions) which will cause minor inconvenience to the travelling public and insignificant driver delays.

20. **Chapter 26 Traffic and Transport, Table 26.4** (APP-074) presents measures to maintain access, which are contained in the **Outline Construction Traffic Management Plan** (OCTMP) (an updated version has been submitted at Deadline 3, document reference 8.9). The final CTMP will be produced post-consent, prior to commencement of the onshore construction of the Projects and will accord with the OCTMP (as required by the **draft DCO** (document reference 3.1)). Once contractors have been appointed, the measures within the final CTMP would be approved by Suffolk County Council (as the relevant highway authority) in consultation with East Suffolk Council (as the relevant planning authority) and agreed prior to the commencement of onshore works. Notification of the traffic management measures will be in accordance with the requirements of the New Roads and Street Works Act 1991 and other relevant highways legislation, ensuring roadworks are co-ordinated to minimise impact.
21. In addition, the Projects will interact with a number of PRoW within the onshore development area during its construction and operation. PRoW include public roads and pavements, footpaths, bridleways and byways which are formally designated as PRoW by Suffolk County Council. The **Outline Public Rights of Way Strategy** (OPRoWS) (an updated version has been submitted at Deadline 3, document reference 6.1) provides detail on how these interactions will be managed (for both temporary and permanent measures). A final detailed Public Right of Way Strategy (PRoWS) will be produced post-consent, during the detailed design phase of the Projects. The relevant highway authority and local planning authority will be consulted during preparation of the PRoWS which will be in accordance with the **OPRoWS** (document reference 6.1).

1.6 Water Supplies

22. **Chapter 20 Water Resources and Flood Risk** (APP-068) includes applicable management and mitigation measures for the construction and operational phases of the Projects. The measures have been provided to reduce the impact of the Projects on surface and groundwater resources. All groundwater receptors are presented in **Figure 20.3** (APP-267), including unlicensed ground water abstractions.
23. As outlined in the **Draft Statement of Common Ground with the Environment Agency** (REP1-077), the Applicants have updated the **Outline CoCP** (document reference 8.1) with regards to control measures for surface water and drainage management during construction, including:



- A pre-construction survey of water features (i.e. site walkover / visual inspection) will be undertaken to ensure that water features are identified and subject to hydrogeological risk assessments where required.
- Hydrogeological risk assessments will be undertaken prior to commencement of any construction activity:
 - that could cause changes to aquifer flow or affect aquifer water quality within 500m of any groundwater dependent habitats within ecological sites;
 - that requires excavations below 1m within 250m of boreholes or springs; or
 - within 250m of a groundwater abstraction.

1.7 Consultation and Communication during Construction

24. As outlined in **section 2.5** of the **Outline CoCP** (document reference 8.1), a Stakeholder Communications Plan will be developed as part of the final CoCP. This would follow the approach as used for East Anglia ONE.
25. The Applicants will ensure effective and open communication with local communities and businesses that may be affected by the construction works. Communications will be co-ordinated on site by a designated member of the construction management team. Local communities will be kept informed of the type and timing of works involved, paying particular attention to activities which may occur in close proximity to receptors. A combination of communication channels, for example information boards and parish council meetings, will be employed to keep local communities informed.
26. A designated local community liaison officer will respond to any public concerns, queries or complaints in a professional and diligent manner as set out by a project community and public relations procedure which will be submitted for comment to the relevant planning authority.
27. Parish Councils in the relevant area will be contacted (in writing) in advance of the proposed works and ahead of key milestones. This information will include indicative details for timetable of works, a schedule of working hours, the extent of the works, and a contact name, address and telephone number in case of complaint or query. Enquiries will be dealt with in an expedient and courteous manner. Any complaints will be logged, investigated and, where appropriate, rectifying action will be taken.