



# East Anglia ONE North and East Anglia TWO Offshore Windfarms

# Deadline 4 Project Update Note

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

# **Deadline 4 Project Update Note** 13<sup>th</sup> January 2021



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# Glossary of Acronyms

DCO	Development Consent Order
SSR	Substation Sensitive Receptor

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# 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.	
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.	



### 1 Project Update Note

#### 1.1 Introduction

- 1. This project update note has been prepared by East Anglia TWO Limited and East Anglia ONE North Limited (the Applicants) to provide details of key project updates for the East Anglia TWO project and East Anglia ONE North project (the Projects) and their Development Consent Order (DCO) applications (the Applications).
- 2. This project update note supplements the *Project Update Note* (REP2-007) submitted at Deadline 2 and the *Deadline 3 Project Update Note* (REP3-052).
- 3. This document is applicable to both the East Anglia ONE North and East Anglia TWO 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 23<sup>rd</sup> December 2019. Whilst for completeness of the record this document has been submitted to both Examinations, if it is read for one project submission there is no need to read it again for the other project.

#### 1.2 Control of Noise During Operational Phase

#### 1.2.1 Noise Limit Compliance Locations

4. Requirements 26 and 27 of the draft DCO (REP3-011) limit the operational noise rating level of Work No. 30 (onshore substation), for each individual project and cumulatively, at two locations (1 Woodside Cottages and Woodside Barn Cottages). As discussed with East Suffolk Council and Suffolk County Council (the Councils) during the Statement of Common Ground (SoCG) process, the Applicants also commit to an additional noise sensitive location, in the vicinity of substation sensitive receptor (SSR) SSR3 (Little Moor Farm) being included within Requirements 26 and 27 of the draft DCO (REP3-011), which will be updated at Deadline 5 to reflect this change. This ensures the thorough regulation of noise levels from the onshore substations by establishing a triangulation of monitoring locations at the three closest properties to the onshore substations to the north (SSR3), to the south east (SSR2) and to the south west (SSR5 NEW). The Noise Modelling Clarification Note submitted at Deadline 4 (document reference ExA.AS-8.D4.V1) shows these locations relative to the onshore substations.

#### 1.2.2 Revised Noise Limits

5. Since submission of the Applications, the Applicants have undertaken extensive engagement with their design teams and supply chain regarding the design of the onshore substations, with the objective of reducing the received noise level





- at the nearest residential properties. This has resulted in further mitigation measures being identified for equipment within the onshore substation.
- 6. Furthermore, the positioning of the equipment within the onshore substations has been updated in light of the Applicants' commitment to reduce the onshore substation footprint (*Project Update Note* (REP2-007)) and to reduce building and external equipment heights (*Deadline 3 Project Update Note* (REP3-052)). These amendments have warranted the updating of the noise modelling, results of which are presented within the *Noise Modelling Clarification Note* (document reference ExA.AS-8.D4.V1) submitted at Deadline 4.
- 7. The results of this modelling have confirmed the Applicants' ability to reduce the maximum received noise levels at the abovementioned nearest noise sensitive receptors.
- 8. In considering the revised noise limits, the following methodology was followed in sequence:
  - No noise limit will exceed the measured background noise limits (presented within Table 11 of the *Noise Modelling Clarification Note* (document reference ExA.AS-8.D4.V1)) by 5dBA, ensuring that the residual impact at these locations remains negligible. Due to the lower measured background noise level recorded at SSR3, the Applicants' have therefore adopted a noise limit of 31dBA at SSR3.
  - In line with the Applicants' objective of reducing the impacts of the Projects where possible, the Applicants have considered the cumulative onshore substation rating noise level at SSR2 (29.9dBA as per the *Noise Modelling Clarification Note* (document reference ExA.AS-8.D4.V1)) and applied a design contingency which is essential in the design and operation of the Projects. The Applicants' have therefore adopted a noise limit of 32dBA at SSR2.
  - The design flexibility required at the onshore substation is such that layout of the onshore substation may be revised at the detailed design stage (within the parameters permitted by the Projects' DCOs and in accordance with the environmental impact assessments undertaken), resulting in a lower onshore substation rating noise level at SSR2 and a higher onshore substation rating noise level at SSR5 NEW. To ensure the necessary flexibility, the Applicants' have therefore adopted a noise limit of 32dBA at SSR5 NEW.
- 9. The above noise limits apply to each individual onshore substation alone and cumulatively and deliver a significant reduction in the permitted received noise levels from that originally proposed. Requirements 26 and 27 of *draft DCO* (REP3-011) will be updated at Deadline 5 to reflect this change.





10. Whilst the above is of particular benefit to the three closest residential receptors, it is also noted that the Projects' contribution to noise levels at residential properties further afield (such as within the village of Friston) will also reduce. The *noise modelling clarification note* submitted at Deadline 4 (document reference ExA.AS-8.D4.V1) presents further details on the reduction in received noise levels in the wider area.

#### 1.3 A12/A1094 Junction (Friday Street Junction)

- 11. Representations have been made by the Councils regarding the existing A12/A1094 junction (Friday Street junction) arrangements and the Projects' use of this junction during construction.
- Measures have been proposed by the Applicants, in consultation with the Councils, to further improve the A12/A1094 Friday Street junction during the Projects' construction period by the installation of a temporary traffic signal control (i.e. traffic lights), complementing the measures presented within *Chapter* 26 *Traffic and Transport* of the Environmental Statement (ES) (APP-074).
- 13. The *Traffic and Transport Deadline 4 Clarification Note* (ExA.AS-26.D4.V1) presents details of this additional measure, including proposed layouts and traffic modelling results. The measures proposed at the Friday Street junction are capable of meeting the following objectives agreed with the Councils:
  - Improve road safety (reduction in total collisions and severity ratio);
  - Be deliverable prior to the commencement of construction of the Projects;
  - Be deliverable within the highway boundary;
  - Not prejudice a future two-village bypass (either by Suffolk County Council or EDF Energy);
  - Minimise delays to the travelling public (construction and operation); and
  - Provide a cost-effective solution.
- 14. The additional measures are accommodated entirely within the highway boundary and comprise:
  - Installation of traffic signals on the A12 and A1094;
  - High friction surfacing on all junction approaches;
  - Traffic signal ahead warning signs on all junction approaches;
  - Islands and amended kerb lines on the A12 and A1094;
  - Formation of separate left and right turn lanes from the A1094 onto the A12;
     and





- A reduced speed limit from 50mph to 40mph on the A12 approaches to the junction (as per the mitigation measures proposed within the Applications).
- 15. The proposals have been developed so that the traffic signal controlled junction can either be converted back to a priority junction with single lane dualling (and therefore not prejudice the ability of Sizewell C to establish a roundabout solution proposed as part of the Sizewell C New Nuclear Power Station proposal) or continue to be operated beyond completion of construction of the Projects.
- 16. The Applicants intend to enter into a Section 278 Agreement under the Highways Act 1980 in order to facilitate the works. Discussions with the Councils are ongoing regarding the detail of these arrangements and the timing of the works.
- 17. Suffolk County Council and East Suffolk Council agree in principle that traffic signals at the junction would address their concerns regarding the existing junction arrangements and the Projects' use of the junction during construction.

#### 1.4 Additional Planting at National Grid Substation

- 18. Little Moor Farm is located 1km to the north of Friston and would have originally been located on the edge of Friston Moor. This Grade II Listed Building is a 17<sup>th</sup> century two storey timber framed and plastered structure with a brick casing to the ground floor. It was built as a farmhouse but, although it is still in residential use, it is no longer part of an agricultural holding. Outbuildings associated with the farmhouse, mapped in the 19<sup>th</sup> century, have since been demolished.
- 19. The heritage significance of this asset (and the justification for its designation) lies primarily in the architectural and archaeological interest of its fabric, as a well-preserved example of the local vernacular building tradition.
- 20. With the mitigation proposed at the time of the Applications, it was concluded that the landscape proposals will provide a small degree of mitigation at Little Moor Farm (including offsetting) but the assessment of residual impact on the setting of Little Moor Farm remained at medium magnitude and is still an effect of moderate significance in EIA terms.
- 21. In discussion with Historic England during the SoCG process, the Applicants have explored options to reduce the impact of the National Grid substation on Little Moor Farm and have proposed addition woodland planting to the south of Little Moor Farm to screen the lateral extent of the National Grid substation and the onshore substations.
- 22. The extent of this additional planting shown within the *Outline landscape Mitigation Plan* (document reference ExA.AS-14.D4.V1) submitted at Deadline
  4, is predicted to provide an effective screen after 15 years of growth between





- Little Moor Farm and the substations which would significantly reduce the adverse impact on the rural agricultural landscape character.
- 23. Taken with the general lowering of the height of structures which would increase the effectiveness of other screening vegetation, the additional planting would allow Little Moor Farm to continue to be experienced in a setting that retained much more of its rural agricultural character, although some elements higher of the substations and related sealing end compounds would still be visible.

#### 1.5 Grid Connection Dates

- 24. In 2019 the Applicants reviewed the Projects' delivery programme in order to identify opportunities to bring forward their delivery programme and assist the UK in deploying much-needed renewable energy capacity as soon as possible. Towards the end of 2019, the Applicants engaged with National Grid regarding the potential to revise the Projects' grid connection dates. This facilitated the submission of an application to National Grid to modify the East Anglia TWO project's Connection Agreement in December 2019, and towards the end of 2020 the East Anglia TWO project's Connection Agreement was amended to reflect a grid connection date of November 2024.
- 25. An application to modify the East Anglia ONE North project's Connection Agreement was submitted to National Grid towards the end of 2020. East Anglia ONE North Limited await the outcome of the application. Should a modified connection date be acceptable to both parties, it is anticipated that the East Anglia ONE North project's Connection Agreement will be modified in mid-2021.

#### 1.6 Appointment of Preferred Bidder

26. In December 2020, Siemens Gamesa Renewable Energy Limited was selected as preferred bidder to supply and install the turbines for the Projects. The Applicants and Siemens Gamesa Renewable Energy Limited will work together ahead of the next Contracts for Difference auction to optimise the Projects with the ambition of signing turbine supply and installation agreements thereafter. The letter from Siemans Gamesa Renewable Energy Limited submitted at Deadline 4 (document reference ExA.AS-29.D4.V1) as presents further details of the collaboration between the parties.