



The Planning Act 2008

East Anglia One North (EA1N) and East Anglia Two
(EA2) Offshore Wind Farms

Planning Inspectorate Reference: EA1N – EN010077 &
EA2 – EN010078

Deadline 3 - 15 December 2020

East Suffolk Council's Response to Additional
Information Submitted by Applicants at Deadline 2

Review of Additional Information Submitted by Applicants at Deadline 2

- 1.1. East Suffolk Council (ESC) has noted that the following additional documents were submitted by the Applicants at Deadline 2 which are of relevance to the Council's responsibilities:
 - Project Update – REP2-007
 - Effects with Regard to the Statutory Purposes of the Suffolk Coast and Heaths AONB and Accordance with NPS Policy - Version 001 – REP2-008
 - Clarification Note - Landscape and Visual: Sizewell C Cumulative Impact Assessment – REP2-010
 - Clarification Note – Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) – REP2-009
 - Clarification Note – Noise and Vibration Assessment – REP2-011
- 1.2. The Council has reviewed these documents and provided comments in relation to each document separately in the table on the following page of this document. The comments relate to both East Anglia One North (EA1N) and East Anglia Two (EA2) projects.
- 1.3. The comments contained within this document are from ESC. The Council continues to work closely with SCC on these projects but to avoid repetition, each Council will lead on specific topic areas as set out in the Councils joint Local Impact Report. The Council notes the submission of Clarification Note – SuDS Infiltration Note (REP2-012) but will defer to SCC on this matter as the Lead Local Flood Authority.
- 1.4. The Council also notes the submission of updated draft Development Consent Orders. We will review and provide further comment on the submissions at Deadline 4.

The table below details ESC's comments in relation to additional information submitted by the Applicants at Deadline 2.

Document submitted at Deadline 2		East Suffolk Council's Comments
Project Update – REP2-007		
Section 1.1 Commitment that should both projects be consented and built sequentially, the ducting for the second project will be installed along the whole onshore cable route in parallel with the installation of the onshore cables of the first project.		The Council welcomes this commitment and will review the draft Development Consent Orders to understand how this is secured.
Section 1.2 Commitment to reduce the footprint of the EA1N and EA2 substations to 190m by 170m.		The Councils welcome this commitment which also facilitates the retention of an established wooded area to the west of the onshore substations. The Council will review the updated boundary of Work Number 30 to be submitted by the Applicants at Deadline 3.
Effects with Regard to the Statutory Purposes of the Suffolk Coast and Heaths AONB and Accordance with NPS Policy - Version 001 – REP2-008		
		The Council will defer to the Natural England on this matter.
Clarification Note - Landscape and Visual: Sizewell C Cumulative Impact Assessment REP-010		
		The Council welcomes the submission of this clarification note and has no further comments.
Clarification Note – Sizewell Projects Cumulative Impact Assessment (Traffic and Transport) – REP2-009		
Sections 2 and 3		ESC will defer to SCC as the Local Highway Authority.
Section 4 – Cumulative Air Quality Impacts		The Council understand that the Applicants will include a commitment in the Outline Code of Construction Practice for its contractors to use Euro Standard VI vehicles where possible. While we welcome this commitment, we also request a minimum commitment to Euro VI vehicles. This should be provided as confirmation of the minimum proportion of HGVs used on the EA1N and EA2 projects that will

		<p>meet the Euro VI standard. For all HGVs which are pre-Euro VI, a commitment should be made to meet the Euro V standard. This will enable us to understand the range of potential air quality impacts in sensitive areas such as the Stratford St Andrew Air Quality Management Area (AQMA).</p> <p>The Council is seeking to set up an open discussion between the Applicants and EDF Energy (the Applicant for the Sizewell C scheme) to enable the potential for in-combination impacts in the Stratford St Andrew AQMA, and the contribution from each project, to be understood. The Council is hopeful that co-operation with this process will facilitate a rapid resolution of uncertainties on this important topic.</p>
Noise and Vibration Clarification Note – REP2-011		
<p>Section 2 Baseline Survey Data Omissions - Paragraph 29</p>		<p>BS4142:2014+A1:2019 states that background sound levels should be measured under weather conditions that are representative and comparable to the weather conditions when the specific sound occurs. The Applicants were asked to clarify if the effect of humidity on corona discharge noise from existing power lines on the measured noise levels was considered in the analysis of the measured backgrounds sound levels. Based on the supplied information it is clear that the effect of humidity was not considered which brings the validity of the background sound levels used in the assessment into question. This issue is discussed in the background sound analysis submitted in Appendix 4 of the Local Impact Report (REP1-132).</p>
<p>Section 3 – Construction Phase Assessment Noise Modelling Methodology - Paragraph 38</p>		<p>The Council seeks clarification on this point as it had been previously understood that the noise sources had been distributed around the work areas and not modelled at the edge of the Order Limits as stated. The construction noise models may need to be re-run if they have not previously run with noise sources located at the edge of the Order Limits, as stated by the Applicants, in order to define the</p>

		appropriate noise mitigation measures at Code of Construction Practice (CoCP) stage.
Noise Modelling Methodology - Paragraph 39		This Council seeks clarification on this point as this was not understood to be the case. Furthermore, it is unclear what is meant by the “entire duration” as the Council’s queries regarding the construction phasing used to develop the construction noise models remain unresolved. This is discussed further in comments on Appendix D of this document.
Noise Prediction Methodology - Paragraph 47		It is not correct to say that the BS 5228 prediction methodology represents a more robust worst case than ISO 9613-2 when the latter takes additional effects into account, including downwind propagation which could increase predicted noise levels. Given this, and other uncertainties associated with the Applicants’ construction noise modelling, the Council’s expectation is that the Applicants’ CoCP will set out a proposed noise monitoring programme early in the construction works to verify the models used in the construction noise assessment and identify areas where additional noise mitigation measures are likely to be required to comply with the limits set out in the construction noise assessment.
Construction Phasing/Programming of Works - Paragraph 49		The clarification note does not satisfactorily explain the construction phases used to develop the construction noise model. This is discussed further in comments on Appendix D of this document.
Noise Mitigation and Best Practice - Paragraph 51		The Applicants will be required to provide detailed proposals for localised screening and other noise mitigation measures as part of the CoCP before this is approved by ESC.
Noise Mitigation and Best Practice - Paragraph 55		The Applicants have not provided any preliminary assessment of what essential activities are likely to be required outside the stipulated construction hours. This information should be submitted as part of the CoCP before this is approved by ESC.
Paragraph 59		It is not correct to say that a rating level of 5dB over the background sound level meets with industry standards. BS4142:2014+A1:2019 describes a methodology for assessment of the impact of noise from industrial sources but does not set a specific

		<p>assessment criterion. There is no overarching policy or other “industry standard” which specifies a +5dB or any rating level limit as the definitive criterion. Instead, the appropriate limits are determined on a case by case basis, depending on context. There is precedent for lower rating level limits being set in other comparable NSIP assessments.</p>
<p>Section 4 Operation Phase Assessment Operational Noise Limits - Paragraph 60</p>		<p>The quotation from BS4142:2014+A1:2019 highlights the problem with the proposed limit of 5 dB above background sound level. A rating level of +4.9 dB would be permitted under the proposed noise limit but the Standard clearly states that this level of noise would constitute an adverse impact.</p>
<p>Noise Model Source Data – Projects’ Onshore Substations - Table 4</p>		<p>This table was modified following discussion with the Applicants. The Council has requested additional information on the input data used in the operational noise model be provided, including dimensions of the sources modelled. This is relevant because there is a concern that the modelling methodology understood to be adopted by the Applicants may substantially underestimate the noise levels at the receptors. The Council continues to engage with the Applicants on this matter and await the provision of this further information.</p>
<p>Uncertainty with the Operational Noise Assessment - Paragraph 70</p>		<p>It is correct to say that the +/- 3dB uncertainty budget (as defined in the calculation standard implemented by SoundPLAN) could result in the predicted noise levels being up to 3 dB higher or lower than the stated figure. However, ignoring the fact that the result predicted by the software could be up to 3 dB higher than those reported is not consistent with the Rochdale Envelope approach to Environmental Impact Assessments (EIA), which stipulates that the worst case should be assessed.</p>
<p>Rating Noise Level Corrections – Position on Tonality - Paragraph 73</p>		<p>Clause 9.2 of BS4142:2014+A1:2019 describes a subjective approach for determining whether an existing noise source contains tonal elements or other characteristics which would attract an acoustic feature correction. However, the Applicants go on to state that the assessment was made using a totally different numerical method described elsewhere in the document which requires 1/3 octave source data. Assessment of tonality using Octave Band data is not in accordance</p>

		with the Standard. The non-standard methodology used by the Applicants to test the supplied Octave Band data for tonality is mathematically flawed and will never determine that a tone is present, even when tested on a pure tone source.
Paragraph 75		The Octave Band data supplied by the Applicants is entirely consistent with the characteristic strong tonal harmonics generated by the magnetostriction effects in transformers and other electrical transmission equipment. As discussed in the previous comment, it is not possible to use the 1/3 Octave Band test to determine whether Octave Band data is tonal. The Applicants have not supplied any 1/3 Octave source which would allow the Council to conduct tonality analysis. In the absence of any evidence to the contrary, this equipment must be assumed to contain these strong tonal elements. This is the approach used the by Applicants' consultants in their operational noise assessment for other onshore substations, where a tonality correction was applied.
Position on 'Other Characteristics' - Paragraph 80		Clause 9.2 of BS4142:2014+A1:2019 states that "Where the specific sound features characteristics that are neither tonal or impulsive, nor intermittent, though otherwise are readily distinctive against the residual acoustic environment, a penalty of 3 dB can be applied". The Council maintains that the new industrial noise sources associated with the substation site will be readily distinctive against the otherwise entirely rural noise climate and in the event that these are audible and no other acoustic feature corrections are applied the rating levels should be subject to a +3dB correction, as stated in the Standard.
Section 5 - Other Matters Consideration of Alternatives – Paragraph 87		The Council maintains that the Applicants have not assessed a worst-case scenario and therefore not followed the Rochdale Envelope approach to EIA.
Appendix D: Construction Programme Phasing Clarification Note Paragraph 11		It is still not clear from the information supplied why this construction period is considered to be the worst case.

Appendix D, Para 11		While it may be correct that Months 1-24 are the worst case, it is not clear why 3 months of potentially noisy reinstatement work have been excluded from the assessment.
Appendix D, Table 2.2		The information in Table 2.2 clearly shows that the outline programme has been considered in some detail. However, it is still not clear how this programme relates to the assessment periods used in the construction noise model. This is important because the specifics of how the various activities were combined in the modelling assessment periods directly affects the outcome of the model.