



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES
2010

East Anglia TWO Offshore Wind Farm

Appendix E2 to the Natural England Deadline 1 Submission

**Natural England's Comments on Appendix 7: Offshore Windfarm Visibility and
Visual Impact Threshold Distances (2012) Journal Article [AS-044]**

For:

The construction and operation of East Anglia Two Offshore Windfarm, a 900MW windfarm which could consist of up to 75 turbines, generators and associated infrastructure, located 37km from Lowestoft and 32km from Southwold.

Planning Inspectorate Reference: EN010078

2nd November 2020



Appendix E2 Natural England's Comments on Appendix 7: Offshore Windfarm Visibility and Visual Impact Threshold Distances (2012) Journal Article [AS- 044]

This document is applicable to both the East Anglia ONE North (EA1N) and East Anglia TWO (EA2) applications, and therefore is endorsed with the yellow and blue icon used to identify materially identical documentation in accordance with the Examining Authority's (ExA) procedural decisions on document management of 23rd 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.

Natural England thanks the applicant for providing a copy of the article 'Wind Farm Visibility and Visual Impact Threshold Distances in Western Landscapes' Robert G. Sullivan *et al* published 2012. Our specific comments are as follows:

1. We note that the applicant refers to this article as 'Offshore Windfarm visibility and Visual Impact Threshold Distances (2012) Journal Article' (Appendix 7). The article is combination of a literature review and a report on field observations of onshore wind farms located in the Western landscape of the USA of Wyoming and Colorado; hence the article's actual title.
2. We note the size of the turbines in the onshore windfarms studies to be in the range 58m to 95m (to blade tip). Therefore less than one third the height of the 282m turbines proposed for EA2. This is noted on page 28 2nd paragraph.
3. We note also the commentary around the movement of turbine blades being visible at 39km under optimal onshore viewing conditions; and this for machines which are at least 187m shorter than those proposed for EA2. We reflect that optimal viewing conditions are also required for the SLVIA.
4. Table 2 (page 17) is of interest for the definition of visibility ratings and their description.
5. The commentary on night time lighting (page 22 – 23) is particularly interesting. The reference to being visible 'through foreground obstructions' at distances of 58.3km is concerning.
6. On page 42 under 'Other Observations' a description is provided of transient visual effects created by the movement of the turbine blades which have the potential to substantially increase the visibility of these structures. NE considers that these observations to be relevant to both EA2 and EA1N and invites the Applicant to consider the extent to which these



transient visual effects may alter the conclusions of the SLVIA as at present we understand that reference to transient visual effects is missing from the assessment.

7. We draw the attention of the ExA to the commentary on the limitations of photographs and believe it to be a lucid account of this issue.
8. We advise that the concluding remarks in the final paragraph (page 44) on the question, *'How close is too close?'* are especially pertinent for the EA2 SLVIA.

Conclusion

Although there is much in the article which is of interest and in places provides some useful commentary (as we have sought to highlight above) it does not (and nor was it ever intended to) provide any evidence which is directly applicable to the EA2 and EA1N OWF projects. In assessing the evidence presented in the relevant ES for these projects any reliance on the metrics and judgments expressed in the article would be misplaced. Therefore, NE advises that the article is referred to for interest only and an insight into understandings and perspectives on onshore wind farms located outside of the United Kingdom.