



THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES

2010

East Anglia ONE North Offshore Wind Farm

**Appendix A10 to the Natural England Deadline 3 Submission**

**NE Comments on Cumulative Auk Displacement Seabird Assemblage**

**Assessment of FFC SPA and Gannet PVA [REP2-006]**

For:

The construction and operation of East Anglia ONE North Offshore Windfarm, a 800MW windfarm which could consist of up to 67 turbines, generators and associated infrastructure, located 36km from Lowestoft and 42km from Southwold.

Planning Inspectorate Reference: EN010077

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15<sup>th</sup> December 2020



## **Natural England's comments on Cumulative Auk Displacement and Seabird Assemblage Assessment of FFC SPA and Gannet PVA [REP2-006]**

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.

### **1. Cumulative Auk Displacement Updates**

1.1 Updated displacement tables: We welcome that the cumulative and in-combination displacement tables for guillemot and razorbill have been updated to include the offshore wind farms (OWFs) that were previously missing from the assessments. We note that where estimates are available, these have been included and where no data are available, the windfarm has been added to the table for completeness, but without any estimate.

1.2 Displacement Conclusions: We note that the Applicant's view is that the updates presented do not alter the conclusions of APP 043 and APP 060 i.e. negligible significance for cumulative displacement at the EIA scale and no adverse effects on integrity (AEoI) for in-combination displacement at the Flamborough and Filey Coast (FFC) SPA. However, at the Norfolk Boreas Examination Natural England's final advice on these issues was as follows and **therefore we are unable to agree with the Applicant's position:**

- EIA cumulative displacement: a significant adverse impact (i.e. moderate adverse or above) to razorbill and guillemot from cumulative operational displacement cannot be ruled out at an EIA scale. This is irrespective of whether the Hornsea 3 and Hornsea 4 projects are included in the cumulative totals or not (as set out in our Deadline 4 advice during the Norfolk Boreas examination<sup>1</sup>). Please see Natural England's Boreas Deadline 4 response in REP4-040.

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<sup>1</sup> Natural England (2020) Norfolk Boreas Offshore Wind Farm Deadline 4: Updated Ornithology Advice – Natural England's comments in relation to the Norfolk Boreas updated offshore ornithological assessment, submitted at Deadline 2. Available from: <https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/projects/EN010087/EN010087-001629-DL4%20-%20Natural%20England%20-%20Updated%20Ornithology%20Advice.pdf>



- FFC SPA in-combination auk displacement: we were able to conclude that an AEol on the guillemot and razorbill features of the FFC SPA could be ruled out from displacement in-combination with other plans and projects if Hornsea 3 and Hornsea 4 are excluded from the in-combination totals. However, we were not in a position to advise that an AEol could be ruled out for the guillemot and razorbill features of the FFC SPA for displacement in-combination with other plans and projects when the Hornsea 3 and Hornsea 4 projects are included in the in-combination totals. This was due to our significant concerns regarding the incomplete baseline surveys for the Hornsea 3 project, the associated level of uncertainty with regards to the potential impacts of that project and the inevitable uncertainty associated with the figures for Hornsea 4 from the PEIR and are subject to change (as set out in our Deadline 4 advice during the Norfolk Boreas examination<sup>1</sup>).
- Following the Secretary of State (SoS) decisions on Thanet Extension, Vanguard and the 'minded to consent' letter on Hornsea 3, our updated advice at Norfolk Boreas with regard to auk displacement for those species/site combinations changed. We previously concluded in our Deadline 4 advice<sup>1</sup> that a significant adverse impact (i.e. moderate adverse or above) for cumulative EIA scale or AEol for in-combination could not be ruled out irrespective of whether Hornsea 3 was included or not. Even with the removal of the contributions to these totals from Thanet Extension, the contributions from Hornsea 3 will most likely be greater than those from Thanet Extension. Therefore, in these instances our advice would most likely remain as that set out at Deadline 4. Regarding the EIA scale cumulative displacement for guillemot and razorbill, our advice was that a significant adverse impact (i.e. moderate adverse or above) to razorbill and guillemot from cumulative operational displacement cannot be ruled out at an EIA scale irrespective of whether the Hornsea 3 and Hornsea 4 projects are included in the cumulative totals or not (see our response to ExA Q5.8.6.2 in our Deadline 14 response<sup>2</sup>).

1.3 In-combination/Cumulative figures: We note that the figures presented in Tables 1 and 2 in REP2-006 match the Boreas Deadline 2 submission<sup>3</sup>, which was the last in-

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<sup>2</sup> Natural England (2020) Norfolk Boreas Offshore Wind Farm Deadline 14: Natural England's response to Examining Authority's Fifth round of Written Questions. Available from: <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010087/EN010087-002408-DL14%20-%20NE%20-%20Response%20to%20WQ.pdf>

<sup>3</sup> Norfolk Boreas Limited (2019) Norfolk Boreas Offshore Wind Farm: Offshore Ornithology Assessment Update. Available from: <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010087/EN010087-001420-Offshore%20Ornithology%20Assessment%20Update.pdf>



combination/cumulative total update for auks undertaken by the Boreas Applicant. However, the East Anglia One North/East Anglia Two Applicant is advised to check the 'all projects' (incl. Hornsea 3 and Hornsea 4) total presented for the breeding season EIA scale for guillemot and hence the annual EIA total, as it appears that the breeding season total for all projects still includes the figure for Thanet Extension.

1.4 Omission of Kentish flats: Although a minor omission, the annual total under FFC SPA for Kentish Flats Extension is omitted, but should be 0.2.

1.5 Inclusion of Hornsea Project 3: The figures presented by the Applicant in Tables 1 and 2 of REP2-006 for Hornsea 3 are those Natural England suggested be used for this project in cumulative/in-combination auk displacement assessments during the Norfolk Vanguard and Boreas examinations. However, during the Vanguard and Boreas examinations Natural England noted that we highlighted throughout our written and oral submissions for Hornsea 3 that the lack of sufficient baseline information for the Hornsea Three Zone (i.e. the array area) means that there is a considerable degree of uncertainty (and thereby level of risk) associated with these figures and these should not be seen as Natural England's agreed position on the levels of impact from Hornsea 3. Therefore we welcome that Applicant has presented cumulative/in-combination totals for all projects excluding Hornsea 3. Further consideration of these figures may be required once Hornsea 3 has been formally determined.

1.6 Inclusion of Hornsea Project 4: The figures presented by the Applicant in Tables 1 and 2 of REP2-006 for Hornsea 4 match those included by Boreas in their Deadline 2 updated assessments<sup>3</sup> for this project, but it should be noted that the figures for Hornsea 4 come from the PEIR for that project. These figures and the methodologies to produce them are subject to ongoing discussions through the evidence plan process and therefore have an element of uncertainty associated with them and are likely to change. Therefore, we welcome that the Applicant has presented cumulative/in-combination totals for all projects excluding Hornsea 4 and also excluding both Hornsea 3 and Hornsea 4. Further consideration of these figures may be required once Hornsea 4 application is submitted, which is expected to be before the end of the EA1N and EA2 examination.



## **2. Flamborough and Filey Coast (FFC) SPA Seabird Assemblage Assessment**

2.1 Alone conclusions: We agree with the Applicant's conclusions that there will be no adverse effect on the integrity (AEol) of the SPA in relation to any of the individually named species due to either the East Anglia TWO or the East Anglia ONE North projects alone.

We also agree with the Applicants that due to impacts on the individual components of the seabird assemblage feature, it can be concluded that there will be no risk of adverse effect on the integrity on the seabird assemblage feature itself for the projects alone.

2.2 In-combination conclusions: We note that during the Norfolk Boreas Examination Natural England concluded that whilst we advised that an AEol on the assemblage from in-combination impacts could be ruled out when Hornsea 3 and Hornsea 4 were excluded from the totals, we weren't in a position to rule out AEol for the assemblage when Hornsea 3 and Hornsea 4 were included in the totals. This was due to the uncertainty in the figures for these Hornsea projects. It is likely that our advice regarding this will remain the same for East Anglia One North and East Anglia Two, unless further information from those projects can be provided in a timely manner to be included into this examination

## **3. Gannet Population Viability Analysis (PVA)**

3.1 Update to CRM predictions in Table 1: We suggest that the figures in Table 1 are presented like the collision risk modelling (CRM) predictions in the Environmental Statement (including the range of predictions based on 95% confidence intervals CIs of density data), the displacement predictions (again including the range of predictions based on the 95% CIs of abundance/density) and then the summed totals.

We also advise that the % of baseline mortality of the colony the predictions equate to are presented, in order to ascertain whether predictions equate to 1% or more of baseline mortality, and hence require further consideration.

3.2 Inclusion of a range of predictions in Table 1: The collisions in Table 1 of this section of REP2-006 appear to be just the mean CRM predictions. The range of predictions, i.e. based on the 95% CIs, should also be considered in order to account for uncertainty/variability in the input data.



3.3 Summation error: We also note that there is a summing error in Table 1 under FFC SPA collisions: 10.4 and 12.2 equals 22.6.

3.4 Use of PVA outputs: During the Norfolk Vanguard and Boreas examinations we noted that there were outstanding concerns with the Hornsea 3 PVAs which were not resolved by the close of the Examination for the Hornsea 3 project. However, these models nevertheless represents the best available evidence on which to base assessments, though this should not be taken as an endorsement or 'acceptance' of the model outputs. As advised during the Boreas examination, the Natural England funded '[Seabird PVA Tool](#)' is now available for use and therefore we advise that the Applicant re-runs/updates the Hornsea 3 PVAs using this tool. Also, as advised at in our Deadline 9 response during the Boreas examination<sup>4</sup>, we recommend that for any PVA models that are constructed in the future, 5,000 simulations should be considered best practice.

3.5 Conclusions: Regarding conclusions, we note that only the central impact predictions are presented, and a range of predictions to account for uncertainty/variability (i.e. those from the 95% CIs) should be presented. However, if the central figure predictions are below the Boreas alone figures, where we concluded no AEol alone for Boreas, it is likely that Natural England would agree with the Applicant's conclusion that there is there is no risk of an AEol for the FFC SPA gannet population; from combined collisions and displacement at either the East Anglia ONE North or East Anglia TWO windfarms alone, nor for the summed total across both windfarms.

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<sup>4</sup> Natural England (2020) Norfolk Boreas Offshore Wind Farm Deadline 9: Natural England's Updated Offshore Ornithology Advice. Available from: [https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010087/EN010087-002099-EN010087\\_Boreas\\_D9\\_13\\_Updated%20Ornithology%20advice.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010087/EN010087-002099-EN010087_Boreas_D9_13_Updated%20Ornithology%20advice.pdf)