THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Morgan Offshore Wind Farm: Generation Assets

Appendix B3 to the Natural England Deadline 3 Submission

Natural England's Comments on Offshore Ornithology

For:

The construction and operation of the Morgan Offshore Wind Project: Generation Assets located approximately 37 km from the Northwest English Coast in the Irish Sea.

Planning Inspectorate Reference: EN010136

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12 November 2024

Appendix B3 to the Natural England's Deadline 3 Submission - Natural England's Comments on Offshore Ornithology

In formulating these comments, the following documents have been considered:

- [REP1-010] Annex 4.5 to Response to Hearing Action Point 15: Offshore Ornithology CEA and In-combination Gap-filling of Historical Projects Note
- [REP1-011] Displacement Rates Clarification Note
- [REP1-012] Annex 4.7 to Response to Hearing Action Point 15: Apportioning Sensitivity Analysis
- [REP2-021] Treatment of Birds in Flight Data in Abundance Estimation
- [REP2-022] Great black-backed gull regional populations

1. Major/Complex comments

- **Overarching comment**

Natural England made a number of comments relating to impact assessment methodology in our Relevant Representations. While the Applicant has responded to many of these comments, an updated impact assessment that reflects this advice has not been supplied.

Instead, the Applicant has essentially stress-tested their conclusions against our advice on specific aspects in isolation from each other. For example, the Applicant has carried out a gap filling exercise to test whether the conclusions of their cumulative and in-combination assessments hold if historic projects are quantified and considered, but the findings of that exercise are not then propagated through into the Applicants actual impact assessments.

Furthermore, some areas of outstanding disagreement remain. For example, the age apportioning of kittiwakes according to a method developed by Hornsea 2 OWF has been retained despite this being contrary to SNCB advice. Again, we highlight that we cannot conclude our positions on the significance of predicted impacts or confirm integrity judgements if assessments following best practice and SNCB advice are not supplied alongside the Applicants preferred approaches.

Natural England advise that an updated ES should be supplied into the Examination containing impact assessments that fully and holistically reflect SNCB advice. This updated ES should clearly indicate the projects impact estimates according to the project and SNCB preferred parameters.

- **[REP1-010] Annex 4.5 to Response to Hearing Action Point 15: Offshore Ornithology CEA and In-combination Gap-filling of Historical Projects Note**

Natural England welcome the Applicants undertaking of quantitative gap-filling for relevant historic OWFs to inform the in-combination and cumulative effect assessments. We also note and welcome the consideration of SNCB advice on investigating proportions of birds in flight from a more representative (i.e. coastal) range of sites by investigation of Awel y Môr data, and the seasonal or monthly breakdown of proportions of birds in flight. Natural England are satisfied that the methodology applied is fit for purpose and has generated indicative impact estimates to quantify impacts that had previously only been considered qualitatively.

Natural England highlight that the results of the gap-filling undertaken demonstrates that this quantification, despite inherent limitations, was of fundamental importance. Significant levels of potential impact to some species have been identified at some of the historic projects.

This is especially true for the large gulls. Thus, we advise that the results of the gap-filling exercise should be used to populate updated cumulative and in-combination impact assessments.

We consider that this exercise has significantly reduced uncertainty and should enable the relevant SNCBs to make informed conclusions and integrity judgements. For the avoidance of doubt, we will only consider those results calculated according to best practice advice and SNCB guidance, i.e. CRM outputs using species group avoidance rates, advised flight speeds, and consented wind farm parameters (where these are available) when formulating our advice and drawing conclusions.

We understand that the Applicant intends to submit updated cumulative and in-combination assessments at Deadline 3 to reflect impacts from additional projects and updates to some existing projects. Thus, we defer comment on cumulative and in-combination impacts and their potential significance until we have reviewed these assessments.

- **[REP1-011] Displacement Rates Clarification Note**

As reproduced by the Applicant in Table 1.1 of this document, Natural England advised in our relevant representation, *"that the project fully considers the SNCB advised ranges of displacement and mortality rates in all assessments."* Furthermore, we note Natural Resources Wales similarly advised the Applicant "*To account for uncertainty in displacement and mortality rates we recommend that apportioned impacts and associated increases in baseline mortality across the range of SNCB advised % displacement and % mortality are also presented and considered in the assessments."*

The Applicant has not followed SNCB advice and has instead presented additional displacement assessments that consider a displacement rate of 70% (the upper end of the SNCB advised range) and a mortality rate of 2% (SNCBs advise impacts across the range of 1-10% should be presented in a matrix). The Applicant's selection of 70% and 2% is informed by the rates for guillemot and razorbill considered in the Secretary of State's HRA of the Sheringham Shoal Extension and Dudgeon Extension offshore wind farms and Hornsea Four offshore wind farm. We do not consider this an appropriate approach and in any event would highlight that we advised the application of up to a 5% mortality rate at Hornsea 4 OWF. We continue to advise the consideration of the full range of SNCB advised rates at Step 1 of the Applicant's two step ISAA process.

We would highlight that this clarification note essentially 'stress tests' the Applicants displacement assessments, but does not also consider SNCB advice on other aspects that could also impact the assessment, such as apportioning. Ultimately, we consider that the various updates to assessments currently presented in isolation should be considered holistically, and a fully updated assessment presented.

- **[REP1-012] Annex 4.7 to Response to Hearing Action Point 15: Apportioning Sensitivity Analysis**

Natural England welcome the response to our advice that the most recent Seabirds Count data should be used to apportion birds to colonies in the breeding season. We note again that an updated assessment reflecting our advice has not been undertaken, but rather, our advice has been considered in isolation to identify any impact on the Applicants original conclusions. While we agree with the Applicant that the consideration of the best available evidence on colony count data does not alter their conclusions regarding impact significance, we note that the project's predicted impacts do, inevitably, change. We advise that the end of Examination project-alone impact assessments, to be utilised by other projects in future cumulative and in-combination assessments, would ideally be apportioned

according to the most contemporary and best available evidence. Accordingly, we advise the holistic implementation of our advice on all aspects should be reflected in a fully updated impact assessment.

- **[REP2-021] Treatment of Birds in Flight Data in Abundance Estimation**

The Applicant has investigated the differences in calculated densities of birds in flight at the array area only, as should be used in a best practice approach to CRM, compared to those densities considered in the original assessment, where densities of birds in flight were calculated across the array +10km buffer for CRM.

The Applicant states that their approach was presented at PEIR, and no issues were raised. This is incorrect. Natural England raised a key concern in our PEIR response, that *"The submitted ES should include presentation of more detailed methods, including corrections for the apportionment of unidentified birds and availability bias and the generation of 'birds in flight' densities for use in CRM"* as it was not sufficiently clear how densities of birds in flight had been derived.

Nonetheless, Natural England welcome the Applicants undertaking of this comparative analysis to address our concerns. We highlight again that we do not consider it appropriate to calculate densities of birds in flight from any area other than that in which collisions arising from the project will be possible i.e. the array area.

We note the comparative densities provided in Appendix A indicate that in many cases, densities calculated from the two approaches are identical, or very similar. Nonetheless, significant overall differences in density do emerge for some species, driven by significant differences in some months. The greatest difference emerges for Manx shearwater, a species with generally low flight heights and thus unlikely to be significantly impacted by collision mortality. As such the 37% increase in density when considering flying birds in the array area may be of limited concern. However, it is of note that work to gather more robust data to inform flight height distributions for this species is being carried out by the ProcBe (Procellariiform Behaviour and Demographics) project under the OWEC (Offshore Wind Evidence and Change) programme. The smallest difference is for kittiwake, a species of key concern, but which appears to behave similarly across the array and 10km buffer. Clearly, in this case, an appropriate density of flying birds has been calculated. The same can probably be said for gannet, with a 10% increase in density if the array only is considered.

The large gulls show significant but variable differences, from a 25% decrease in density for herring gull, to a 20% increase for lesser black-backed gull. This could indicate a purely stochastic effect for these species, as they might be expected to display broadly similar behaviours in the offshore environment.

We note that proportional changes in the densities inputted to CRM can be used to adjust the resulting mortality estimates, and thus, the proportional increase/decrease in densities identified by the Applicant can be used to inform our conclusions on levels of project alone impacts. We are in agreement with the Applicant that those conclusions should remain unaltered due to the low level of predicted impact.

For the avoidance of doubt, while we are content that the densities of birds in flight across the array+10km buffer considered by the Applicant for CRM appear broadly acceptable for the purposes of impact assessment in this case, Natural England continue to advise that densities considered for CRM should be derived from the array area only. Thus, Natural England may take account of the expected changes to CRM results if array area only densities are considered when formulating advice and drawing conclusions.

- **[REP2-022] Great black-backed gull regional populations**

Natural England welcome the updated assessment to consider the correct regional population, however, we retain concerns regarding the impact assessment presented for great black-backed gull.

We advise that the results of the CEA gap-fill exercise need to be considered within the assessment of impacts for great black-backed gull. We note that the Applicant considers those results to be incompatible as the modelled density data used to inform them is considered 'relative' while the design-based densities generated by baseline characterisation surveys for other projects are considered 'absolute'.

Despite this, we consider the Applicants gap-fill results represent the best available evidence for indicative estimates of collisions at historic projects and therefore should be used in updated impact assessments. We note that survey coverage in the relevant region to inform the modelling was good, and the species in question is readily detected. Further, densities related specifically to birds in flight and no corrections for availability bias are required (Bradbury *et al*, 2014).

No further justification for the Applicants position is supplied, such as a comparison of the modelled density data with design-based estimates from other projects in the region. If such analysis indicated that the modelled density estimates do appear to form a questionable basis for impact assessment, it may be appropriate to re-consider a proxy sites approach.

The SNCBs supplied the Applicant and White Cross OWF with the same advice note proposing methodological approaches to gap-filling. However, White Cross OWF opted to use density data derived from the most suitable proxy sites to calculate impact estimates from historic projects in the Irish Sea for cumulative assessments. The results of this exercise are in the public domain (Appendix-Q-Ornithology-Assessment-00.pdf). We note that impact estimates calculated using the scaled 'absolute' density data from proxy sites were substantially higher than those calculated by the Applicant. For example, an annual impact of 22.6 birds is calculated at West of Duddon Sands, compared to just 1.2 from the Applicants approach, while at Gwynt y Môr OWF an annual impact of 12.0 birds is calculated compared to the Applicants 0.4.

Natural England advise that an updated PVA at EIA scale for great black backed gull should consider impacts to all individuals (not just adults) and be based on the gap-filled cumulative predicted impact of 161.5 collisions per annum reported in *'Annex 4.5 to Response to Hearing Action Point 15: Offshore Ornithology CEA and In-combination Gap-filling of Historical Projects Note'*, assuming that this number reflects all relevant SNCB advice.

We currently consider the Applicants calculated increase in baseline mortality (for EIA) of 7.23% to be a significant underestimate, primarily due to the non-inclusion of CEA gap fill results. While we refrain from drawing final conclusions in-lieu of an assessment that follows and fully integrates SNCB advice and best practice, Natural England highlight that in light of the conservation status and population trends of great black-backed gull, this elevated increase in baseline mortality indicate that there is likely to be a significant impact at the EIA scale.

3. References

Bradbury G, Trinder M, Furness B, Banks AN, Caldow RWG, Hume D (2014) Mapping Seabird Sensitivity to Offshore Wind Farms. PLoS ONE 9(9): e106366.

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