Summary of Written Representations

for the

Royal Society for the Protection of Birds

Submitted for Deadline 1

16 January 2019

Planning Act 2008 (as amended)

In the matter of:

Application by Norfolk Vanguard Limited for an Order Granting Development Consent for the Norfolk Vanguard Offshore Wind Farm

Planning Inspectorate Ref: EN010079

Registration Identification Ref: 20012785

1. The RSPB's interest in offshore wind development

Faced with the threats of climate change to the natural world the RSPB considers that a low-carbon energy revolution is essential to safeguard biodiversity. However, inappropriately designed and/or sited developments can also cause serious and irreparable harm to biodiversity, and damage the public acceptability of the necessary low-carbon energy transition technologies.

The UK is of outstanding international importance for its breeding seabirds, including northern gannet for which the UK supports over 50% of the world population. As with all Annex I and regularly migratory species, the UK has particular responsibility under the Birds Directive[1] to secure the conservation of this important seabird's population.

The available evidence suggests that the main risks of offshore wind farms for birds are collision, disturbance/displacement, barriers to movement (e.g. migrating birds, or disruption of access between the breeding areas and feeding areas), and habitat change particularly with associated changes in food availability and the cumulative and in-combination effects of these across multiple wind farms.

Such impacts are avoidable, and the RSPB has spent considerable time working with stakeholders in the UK offshore wind industry to ensure that decisions about deployment of renewable energy infrastructure take account of environmental constraints and seek to avoid or minimise impacts wherever possible. The RSPB therefore strongly advocates the use of rigorous, participative environmental assessments to inform the development of projects.

2. Offshore Ornithology

We have significant concerns regarding the findings of some of the impact assessments. As a result of the methodological concerns (set out below) and our initial indicative[2] recalculation of collision risk

[1] Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version) (the Birds Directive).

[2] Although we did run both deterministic and the stochastic versions of the model, as stated in our Relevant Representations, using the data presented in Appendix 13.1 and associated Annexes, as some of the limitations of the data were not immediately apparent and are poorly explained, particularly the use of means of medians rather than true means, we therefore did not appreciate that these data were not appropriate for the analysis. As detailed in the main text, the Applicant has not provided full details of the parameters for the collision risk models and therefore our initial calculations can only be indicative (and therefore are not presented). However once the Applicant has provided all the information required [noting the Examining Authority's

using the Band (2012) model and the preferable Marine Scotland version of the stochastic model (McGregor *et al*., 2018), the RSPB considers that the impacts have not been adequately assessed and, as such consider that an adverse effect on the integrity of the following SPAs and their species cannot be ruled out as follows:

- The impact of collision mortality on the kittiwake population of the Flamborough and Filey Coast SPA alone and in-combination with other plans and projects;
- The impact of collision mortality on the gannet population of the Flamborough and Filey Coast SPA alone and in-combination with other plans and projects; and
- The impact of collision mortality on the lesser black-backed gull population of the Alde-Ore Estuary SPA alone and in-combination with other projects.

In addition, we consider that insufficient evidence has been provided to rule out potential significant impacts on the following North Sea populations:

- Cumulative collision mortality to North Sea populations of kittiwake and great black-backed gull; and
- Cumulative operational displacement to North Sea populations of red-throated diver, guillemot and razorbill.

Our key methodological concerns are listed below:

- Use of Potential Biological Removal in assessment of impacts on SPA populations;
- Use of an unverified stochastic Collision Risk Model (CRM) which underestimates collision mortality;
- Use of median bird densities within the deterministic CRM;
- Use of revised Nocturnal Activity Rates;
- Use of migration-free breeding season;
- Approach to apportioning of mortality to SPAs for kittiwake and lesser black-backed gull;
- Breeding season gannet avoidance rate of 98.9%;
- Inclusion of unjustified criticisms of kittiwake tracking data; and
- Proposal for mitigation of impacts on the Alde-Ore Estuary SPA.

written question 3.3 overall but specifically 3.3(e), (f) and (j)] we wish to re-examine this issue, including re-running our calculations, which we will provide along with our concerns to the Applicant. If it is not possible to resolve those concerns, we will present them in our next submission to the Examining Authority.

3. Overall Conclusion and Recommendations

Given the concerns outlined above, we do not agree that there is sufficient robust evidence available to support conclusions of no adverse effect on the integrity of the Flamborough and Filey Coast SPA or the Alde-Ore Estuary SPA, or to rule out significant effects on North Sea populations of kittiwake, great black-backed gull, red-throated diver, guillemot and razorbill.

In order to present robust evidence on which a sound assessment can be based, we consider that the Applicant should provide the following updates:

- Stochastic collision risk modelling using the accepted Marine Scotland (McGregor *et al*. 2018) version of the model
- Deterministic collision risk modelling (Band, 2012) using mean monthly bird densities in the calculations (rather than median monthly densities as currently presented)
- Presentation of the full set of parameters required to replicate the collision risk modelling
- Nocturnal activity rates:
    - For all species: presentation of the survey timings to enable understanding of whether likely peaks in activity at first and last light are accounted for.
    - For gannet: if survey timings are known and peaks in activity are accounted for, use of the rates recommended in Furness *et al*. (2018), rather than the Applicant's subsequent revision to these. If survey timings are not known or peaks are not accounted for, use of the rates based on Garthe and Hüppop (2004)
    - For all other species (including kittiwake): use of the rates based on Garthe and Hüppop (2004)
- Where population modelling is used to assess impacts on an SPA, density independent outputs of PVA should be presented, in the form of counterfactuals of population size
- Use of the standard breeding season in assessment of collision risk for kittiwake, gannet and lesser black-backed gull
- Apportioning of impacts to lesser black-backed gull of the Alde-Ore Estuary SPA to be recalculated using SNH (2018) guidance
- Apportioning of impacts to kittiwake of the Flamborough and Filey Coast SPA to be recalculated using SNH (2018) guidance and informed by recent tracking data
- Use of a 98% avoidance rate for gannets in the breeding season

- Consideration of displacement rates of up to 100% and mortality rates of up to 10% in assessments of displacement for auks and red-throated diver