THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

NORTH FALLS OFFSHORE WIND FARM

Appendix G4.4 to the Natural England Deadline 4 Submission

Natural England's comments on 9.13 HRA Shadow AA for Guillemot at the Farne Islands SPA [REP1-056]

For:

The construction and operation of North Falls Offshore Wind Farm, located approximately 40 km from the East Anglia Coast in the Southern North Sea.

Planning Inspectorate Reference EN010119

25 April 2025

Appendix G4.4 Natural England's comments on 9.13 HRA Shadow AA for Guillemot at the Farne Islands SPA [REP1-056]

In formulating these comments, the following document has been considered:

- [REP1-056] 9.13 HRA Shadow AA for Guillemot at the Farne Islands SPA

1. Detailed comments - Potential for Adverse Effect on Integrity (AEOI) of the guillemot feature at Farne Islands Special Protection Area (FI SPA)

Natural England welcome the Applicant's update to the shadow appropriate assessment (AA) for guillemot at the FI SPA to include an in-combination assessment, in response to our relevant representation [RR-234]. We are content with the general approach to the in-combination assessment and welcome the presentation of full displacement matrices alongside detailed consideration of the Applicants preferred displacement and mortality rates of 50% and 1% as well as Natural England's advised reference rates of 70% and 2%.

Natural England highlight that while we continue to advocate a range-based approach to impact assessment for displacement, recent decisions have been made using our advised reference rates, including at the recently consented Rampion 2 Offshore Wind Farm (OWF) where the Secretary of State (SoS) stated, *"values of displacement and mortality for the assessment of displacement impacts on guillemot of 70% and 2% are, at the current time and based on current evidence, suitably precautionary for an assessment to be made."* (Rampion 2 - DESNZ HRA). We further note that in the Rampion 2 decision the Secretary of State agreed with Natural England and concluded that AEOI, in-combination with other plans and projects, could not be ruled out beyond reasonable scientific doubt for the guillemot feature at FI SPA and consent was granted with derogations.

1.1 Population used for assessment and application of correction factors

Natural England note that there has been some inconsistency in the population counts considered by OWF projects for the guillemot feature of the FI SPA and, therefore, in the calculation of a baseline mortality rate and any predicted change to that rate. We note that the Applicant's baseline characterisation data were collected over the 2019 and 2020 breeding seasons, and that the FI SPA colony was heavily impacted by Highly Pathogenic Avian Influenza (HPAI) in 2022 and 2023. Natural England advise that colony counts used for impact assessment should, ideally, be contemporaneous with baseline characterisation data; however, that in itself does not appear to be the source of the inconsistency.

The Applicant has calculated a 5-year (2020-2024) mean count of 54,948 individuals, equivalent to 36,815 pairs after the application of a 0.67 correction factor. The number of pairs has then been doubled to calculate the number of breeding adult individuals at FI SPA as 73,630.

Birkhead and Nettleship (1980) define the correction factor (*k*) as the number of pairs that bred in an area determined by daily checks throughout the laying period, divided by the number of individuals counted in the same area at the time that the colony census is made. Clearly, a substantial amount of work is required before any site-specific correction can be established. The authors also highlight the need to understand interannual variation. Harris (1989) presents convincing evidence that a *k* value of 0.67 is likely to represent a reasonable generic correction factor for a range of (but not all) guillemot colonies. 'Individuals' was the preferred count unit of guillemot for Seabirds Count (Burnell et al, 2021), but any counts of Apparently Occupied Nest/Apparently Occupied Territory/Apparently Occupied Site (AON/AOT/AOS) were multiplied by 1.49 to derive the number of individuals.

Nonetheless, Natural England urge some level of caution in the application of the 0.67 correction factor to transform counts of individuals in breeding habitat to estimates of breeding adults at a colony. Caution here is especially crucial when populations are being derived for the purposes of Habitats Regulations Assessment (HRA), where impacts could be significantly underestimated if inflated population sizes are considered.

We suggest the generic correction factor is probably best used to estimate an indicative number of breeding pairs at a colony unless a colony-specific correction factor has been derived from, for example, mapped and photographed productivity plots. Walsh *et al* (1995) state that the recommended census unit for guillemots is the individual on land and advise against the routine use of a correction factor. This is due to problems of interpretation, and evidence that at some colonies the relationship between the number of breeding pairs and the number of adults is different (e.g. del Nevo, 1990). We further note that the data presented in Harris (1989) are now dated, and we are not aware of specific ongoing monitoring at the Farnes that could ascertain whether the correction factor is appropriate.

It is of note that Harris *et al* (2015) found that the correction factor to convert individuals into breeding pairs changed substantially over the course of their long-term study due to decreases in survival and colony attendance, a situation that may well be replicated at the Farne Islands in recent years due to quite severe HPAI mortality impacts. We therefore question if the application of the correction factor to a mean count of individuals taken from a period of substantial change in colony counts is appropriate.

Natural England do recognise that the 0.67 correction factor was used in the FI SPA Departmental Brief (Natural England, 2015), and further, to inform the FI SPA SACOs (Designated Sites View) and calculate the breeding population abundance target of 32,875 breeding pairs. Furthermore, we accept that the colony counts of individuals reported for auks will inevitably underestimate the number of breeding birds in the population, and this would ideally be accounted for when assessing impacts.

While Natural England highlight that recent OWF applications have not adopted a consistent FI SPA population to assess impacts against, we do believe that to date, all assessments have considered an uncorrected population count of individuals on land, as directly reported in the Seabird Monitoring Programme (SMP). This is considered precautionary, as these counts represent known underestimates. Outer Dowsing OWF (ODOW) assessed impacts against the 2023 SMP count of 43,332 birds, while both Five Estuaries and Dogger Bank South OWFs have used the Seabirds Count (Burnell *et al*, 2021) figure of 64,042, which represents the peak count of individuals on land made between 2015-21 (in 2019).

In this case we advise that the 'corrected' Farne Islands SPA guillemot population estimate used for the Applicant's assessment is can be justified but also consider that an assessment against the Seabirds Count figure of 64,042 (uncorrected individuals) in line with other recent projects would have represented a suitably precautionary approach. We would not expect to draw different conclusions if this smaller population been considered by the Applicant.

It should be recognised that any assessment and subsequent Population Viability Analysis (PVA) is currently complicated by the recent high level of mortality resulting from HPAI. Precautionary approaches to account for colony recovery and the potential for other high impact stochastic events are likely to be required. We highlight the need for further work to inform more accurate population counts for breeding auks, especially at SPA colonies.

1.2 Level of impact and risk of AEOI

Natural England continue to base our advice on a range-based approach to displacement impacts, as detailed in our best practice advice. Specifically, we will consider impacts under

30 - 70% displacement and 1 - 10% mortality scenarios. However, in line with previous relevant cases we will also use the mortality level arising at 70% displacement and 2% mortality as a reference point.

Natural England note that at 70% displacement and 2% mortality of displaced birds, **3** (95% CLs 0-8) adult guillemots are predicted to die per year due to displacement from North Falls. Noting that the matrices presented consider a corrected population estimate and baseline mortality level, we would not expect project alone impacts to exceed an increase in baseline mortality of 1% even if an uncorrected population was considered in line with recently consented applications. In any event, at this level of impact and with connectivity in the non-breeding season only, it is evident that there will not be an AEoI on the guillemot feature of the Farne Islands SPA for North Falls alone.

Natural England have previously advised regulators that we cannot rule out an in-combination AEOI on guillemot at the Farne Islands SPA due to the substantial impacts of the Berwick Bank OWF both alone and in-combination with other plans and projects. Furthermore, Natural England did not agree with the impact assessment carried out for Berwick Bank OWF and considered the estimated mortality from that project likely to be an underestimate.

The Applicant has estimated a total in-combination annual mortality impact of 240 (at 70% displacement and 2% mortality) apportioned to the guillemot feature of FI SPA, which for the Applicant's proposed population represents an increase in baseline mortality of 5.4%. The Applicant has investigated this increase in baseline mortality by PVA, which predicts a reduction in colony growth rate of 0.3%. We note this is lower than the 0.5% reduction in growth rate calculated by a PVA recently submitted as part of the ODOW application which considered a lower in-combination total impact of 214 mortalities per year. The higher reduction in growth rate is likely to be attributed to that projects consideration of a much smaller post-HPAI, uncorrected population count of 46,332 (SMP 2023 count).

Taking into account the above, while Natural England considers the projects contribution of 3 birds to the in-combination total to be relatively small and restricted to the non-breeding season, we note that it is directly comparable to the project alone impact arising at Rampion 2. Thus, we consider the conclusions drawn at that project to be equally applicable here. However, we do consider the Applicant's compensatory measure for guillemot at FFC SPA can be sufficiently scaled to also compensate for the FI SPA impact. As such, a separate derogations case for the Farnes is not necessary.

In conclusion, we are unable to rule out AEoI beyond scientific doubt for guillemot at the Farne Islands SPA in-combination with other plans and projects.

2. References

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