THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Rampion Two Offshore Wind Farm

Appendix B3 to the Natural England Deadline 3 Submission

Natural England's Advice on the Applicant's Deadline 1 submissions relating to Guillemot, Razorbill and Great black-backed gull

For:

The construction and operation of the Rampion 2 Offshore Windfarm located approximately 13km off the Sussex coast in the English Channel.

Planning Inspectorate Reference EN010117

25 April 2024

Appendix B3 to the Natural England Deadline 3 Submission – Natural England's Advice on the Applicant's Deadline 1 submissions relating to Guillemot, Razorbill and Great black-backed gull

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

- [REP1-027] - 8.25.8 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 8 – Further Information for Action Point 34 – In Combination Assessment Update for Guillemot and Razorbill
- [REP1-038] - 8.36 Great black-backed gull assessment sensitivity
- [REP1-035] - 8.33 Ornithological and Marine Mammal Aerial Survey Results of Rampion 2 - 2021
- [APP-150] - 6.4.12.1 Environmental Statement Volume 4, Appendix 12.1: Offshore and intertidal ornithology baseline technical report

1. Summary

Guillemot and Razorbill

We note that the Applicant has presented a full in-combination assessment of impacts on the guillemot and razorbill features of Flamborough and Filey Coast Special Protection Area (FFC SPA) and the guillemot feature of the Farne Islands SPA, as requested by Natural England, including population viability analysis under multiple scenarios.

The Applicant has presented two versions of the assessment for the guillemot and razorbill features of FFC SPA, one using the standard mean max +1SD foraging range from Woodward et al (2019), and a shorter one using the same dataset but excluding data from the Fair Isle colony. The effect of using the shorter foraging range for the assessment is to eliminate the connectivity in the breeding season between FFC SPA and a number of projects with relatively high impacts, such as the four consented projects on the Dogger Bank, Hornsea 1 and Hornsea 2. Whilst recognising the influence that the Fair Isle data has on the Woodward et al foraging ranges, Natural England therefore advises that the standard foraging ranges should be used for in-combination assessments.

The Applicant has argued for the use of lower displacement rates and mortality rates than those advised by Natural England. However, they have presented their preferred rates alongside those that are considered appropriate by Natural England, and those determined by the Secretary of State in previous cases.

The Applicant has concluded that adverse effect on integrity (AEOI) can be ruled out for all of the features considered. **Natural England advise that we do not agree with this conclusion and consider that Rampion 2 will make a contribution to in-combination adverse effects to the three sites under consideration, albeit a modest one.** This level of contribution does however mean that a collaborative approach to compensatory measures, as proposed in-principle by the Applicant for kittiwake, has the potential to deliver a proportionate level of benefit for guillemot and razorbill.

We note that multiple combinations of projects have been presented for each feature. Natural England's advice on each scenario is presented in the table below:

Species & SPA	Projects included in in-combination assessment	Natural England's advice on the conclusion
Guillemot, FFC SPA	Rampion 2 plus all consented projects	AEOI cannot be ruled out
	Rampion 2 plus all consented projects (excluding Hornsea Four)	AEOI can be ruled out
	Rampion 2 plus all other projects	AEOI cannot be ruled out
	Rampion 2 plus all other projects (excluding Hornsea Four)	AEOI cannot be ruled out
Razorbill, FFC SPA	Rampion 2 plus all consented projects	AEOI cannot be ruled out
	Rampion 2 plus all other projects	AEOI cannot be ruled out
Guillemot, Farne Islands SPA	Rampion 2 plus all consented projects	AEOI can be ruled out
	Rampion 2 plus all other projects	AEOI cannot be ruled out

Great black-backed gull (GBBG)

We note that the Applicant has presented a number of arguments, both qualitative and quantitative, on why great black-backed gulls should be considered at lower risk of collision with turbine blades in the Rampion 2 array area than was originally assessed.

The Applicant has demonstrated that significant numbers of gulls use the Rampion 1 turbine platforms as roosting areas, and they have speculated that this behaviour may mean that the number of birds at collision risk appears inflated. Natural England does not support this conclusion. We consider that birds attracted to turbine platforms for roosting are likely to be at significant risk of collision due to their proximity to the blades.

We note that the Applicant has suggested using measures to deter gulls from roosting on turbine platforms as a mitigation measure. Whilst this may merit further exploration, Natural England have concerns about the uncertainties regarding the effectiveness of gull deterrent measures. We question whether the Applicant is aware of any evidence from other existing projects that might aid in reducing this uncertainty.

The Applicant has also proposed some alternative parameters to the SNCB-recommended ones to use for collision risk modelling. Due to the way the recommended parameters were calculated, we advise it is not appropriate to use alternatives.

Finally, we advise that the impacts from the Project alone and cumulatively with other projects should be assessed using the South-west UK and Channel non-breeding BDMPS population of 17,742 individuals as the reference population.

Natural England continues to advise that the impacts of Rampion 2 on great black-backed gull are likely to be significant at the EIA scale when considered cumulatively with other offshore windfarms.

2. Detailed Comments

Table 1 Document Reviewed - [REP1-027] - 8.25.8 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 8 – Further Information for Action Point 34 – In Combination Assessment Update for Guillemot and Razorbill

Point Ref	Location within Submitted Document			Natural England Response	
	Section	Page	Paragraph, Table or Figure Number	Key Concern	Natural England's Advice to resolve the issue
1	2	7	2.1.2	The Applicant asserts that the shorter foraging ranges created by removing Fair Isle data from the Woodward et al. 2019 review were "*acknowledged by Natural England at the end of the Hornsea Four examination whereby they requested the exclusion of Hornsea Three from the guillemot and razorbill FFC SPA in-combination assessments due to the project being situated outside of the mean max plus one SD foraging range to the FFC SPA (Natural England, 2022). If the foraging range value inclusive of Fair Isle is used, Hornsea Three would still be considered to have partial connectivity during the breeding season."* We advise that this is not an accurate representation of Natural England's comments. The longer foraging ranges, i.e. including the Fair Isle data, which have generally been used as standard, were used for the Hornsea Four in-combination assessment. This is illustrated by the fact that estimates for guillemot from all four Dogger Bank OWF projects and Hornseas One and Two, which would lie outside the shorter mean max +1SD foraging range, were included. The impact assessments for these six projects all concluded that there was breeding season connectivity with FFC SPA. In contrast, the majority of the Hornsea	Whilst recognising the influence of the Fair Isle data on the mean max foraging ranges, we advise that the standard mean max +1SD foraging ranges of 153.7km for guillemot and 164.6km for razorbill are the appropriate ranges to consider for the in-combination assessment of impacts on auks at FFC SPA. We advise that this is generally consistent with how previous in-combination assessments have been carried out and ensures that key OWF projects that were agreed to have breeding season connectivity in their respective Examinations are included in the in-combination assessment. As this material is also presented in the report, no further action from the Applicant is needed for Natural England to draw our conclusions.

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				Three array area lies outside the standard mean max +1SD foraging ranges for both guillemot and razorbill, which is why it was deemed appropriate to exclude that project's breeding season impacts from the in-combination assessment. We advise that while it is useful to consider whether a shorter foraging range might be appropriate for a particular site, given there is very limited site-specific evidence from FFC SPA, for the purposes of an in-combination assessment it is appropriate to consider the standard foraging ranges as a worst-case scenario.	
2	2	9	2.2.2	Natural England have previously commented on the APEM (2022) literature review on auk displacement and mortality rates as part of the Hornsea Four examination, available at: EN010098-001249-Natural England - Comments on any other submissions received at Deadline 1.pdf (planninginspectorate.gov.uk). We advise that the information provided in the APEM report does not provide a robust justification for the use of the 50% displacement rate and 1% mortality rate that the Applicant proposes. Natural England's range-based approach seeks to encompass a range of potential displacement effects (30-70%), as observed in post-construction monitoring studies a range of mortality rates (1-10%). This reflects the considerable uncertainty relating to site-specific drivers for, and	We advise that it is appropriate to consider a range of displacement rates to reflect the uncertainty of this assessment and capture a range of possible scenarios, and that Natural England's advice is given on that basis. However, the Applicant has presented Natural England's advised range alongside their own preferred values, and therefore no further information is needed for Natural England to draw conclusions.

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				impacts of, displacement. We also highlight that the mortality rates are a simple way of attempting to capture a range of sub-lethal as well as lethal effects from displacement e.g. adults entering the breeding season in poor condition.	
3	3	10	3.1.1	We note that the Applicant has presented mortality estimates both including and excluding the Hornsea Four values. We welcome this approach. If the mortality caused by Hornsea Four is adequately compensated for, then it would be appropriate to exclude the impacts from in-combination assessments. However, we advise that there is currently a high degree of uncertainty over whether the compensation will be adequately achieved, so it is appropriate to carry out the in-combination assessment including these values as well.	We advise that it is appropriate to present values that both included and exclude Hornsea Four.
4	3	11-14	Table 3.1	We note this table contains errors in the Annual column where values from the breeding season have not been added to those of the non-breeding season. However., the Annual total values appear to be correct.	The Applicant should review and update these values where necessary.
5	4	65	4.1.19	Note that Natural England recently found an error in the default survival rates for razorbill in the 0-1 and 1-2 age classes within the Population Viability Analysis (PVA) tool. The corrected survival rate value is 0.794. Using the corrected figure would result in a minor increase in the projected population	We advise that this is recalculated in an update version of the report, but that it is unlikely to alter the result significantly.

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				trend, though the effect is unlikely to alter the result significantly.	
6	4	73	4.1.23	Natural England does not agree with the assessment that there is no potential for AEOI to the conservation objectives of the guillemot feature of Flamborough and Filey Coast SPA. Although the guillemot population at FFC has grown in recent decades, the sustainability of this growth rate is highly uncertain in the context of climate change impacts, Highly Pathogenic Avian Influenza (HPAI) and multiple other pressures. Productivity rates have been in decline for this species at FFC for some time (Lloyd and others, 2020), indicating that density-dependent effects may already be occurring. We note that it has already been determined by the Secretary of State in the Hornsea Four decision that in-combination impacts on this feature have reached a level where AEOI cannot be ruled out. Please see comment 3 above regarding the treatment of Hornsea 4 in in-combination assessments. When projects from all tiers are considered, we advise that AEOI cannot be ruled out regardless of whether or not Hornsea Four is excluded from the assessment.	We advise that **AEOI cannot be ruled out** for the impacts of Rampion 2 in-combination with all consented projects on the guillemot feature of FFC SPA. We advise that **AEOI can be ruled out** for the impacts of Rampion 2 in-combination with all consented projects excluding Hornsea Four on the guillemot feature of FFC SPA. We advise that **AEOI cannot be ruled out** for the impacts of Rampion 2 in-combination with all other projects (including or excluding Hornsea Four) on the guillemot feature of FFC SPA. It is apparent that the contribution of Rampion 2 to the in-combination total is small. This indicates that an in-principle compensation submission that seeks to collaborate with other projects has the potential to provide a proportionate response.
7	4	77	4.1.27	Natural England does not agree with the assessment that there is no potential for AEOI to the conservation objectives of the razorbill feature of Flamborough and Filey Coast SPA. Natural England	We advise that **AEOI cannot be ruled out** for the impacts of Rampion 2 in-combination with all consented projects on the razorbill feature of FFC SPA.

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				already advised as part of the Hornsea Four examination process that, due to the uncertainty about whether the current net growth of the population is sustainable in the face of numerous pressures, in-combination impacts on this feature have reached a level where AEOI cannot be ruled out.	As per guillemot above, the Applicant may wish to consider methods in which their impact could be compensated for through collaboration with other projects due to the small size of Rampion 2's contribution.
8	4	80-81	4.1.30-32	Natural England acknowledges that due to the fact that no consented projects are within foraging range of the Farne Islands SPA for guillemot, this population may be at somewhat lower risk of displacement impacts compared to FFC SPA. We therefore advise that AEOI can be ruled out for the impact of Rampion 2 in-combination with all consented projects. However, the proposed Berwick Bank OWF in Scottish waters is within foraging range of the Farne Islands SPA. It therefore has breeding season connectivity with the SPA and significant numbers of guillemots displaced from its area have been apportioned to the Farne Islands SPA. We therefore consider that when the effects of Rampion 2 are considered in-combination with all projects of all tiers, AEOI cannot be ruled out due to the impacts of Berwick Bank.	We advise that **AEOI can be ruled out** for the impact of Rampion 2 in-combination with all consented projects on the guillemot feature of the Farne Islands SPA. We advise that **AEOI cannot be ruled out** for the impact of Rampion 2 in-combination with all other projects on the guillemot feature of the Farne Islands SPA. As per FFC SPA above, the Applicant may wish to consider methods in which their impact could be compensated for through collaboration with another project due to the small size of Rampion 2's contribution.

Table 2 Document Reviewed - [REP1-038] - 8.36 Great black-backed gull assessment sensitivity

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9	2	5	2.1.1	The Applicant has stated that the population of great black-backed gulls that Rampion 2 interacts with is stable. This is based on the results of Seabirds Count (Burnell et al. 2023). It should be noted that data collection for Seabirds Count took place from 2015-2021. Data collection for the key protected population of the Isles of Scilly SPA, which comprises the majority of the English breeding population, mostly took place in 2015 and showed an increase of 26% compared to the previous nationwide seabird census, Seabird 2000. We note that other English colonies generally declined between Seabird 2000 and Seabirds Count. However, the results of 2023 surveys showed that the Isles of Scilly SPA population has declined since 2015 and now has fewer apparently occupied nests (AON) (607) than were found in Seabird 2000 (695). Great black-backed gull populations have been reported to have suffered significantly due to the effects of HPAI (Tremlett and others, 2024) and it is not currently known what the lasting impacts of this will be. We advise that it is therefore not necessarily accurate to state that the population of great black-backed gulls in Southern England can currently be considered stable.	For information only

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10	2	10	2.2.5	While it is reasonable to suggest that the weak attraction effect suggested by Dierschke and others (2016) means that the numbers of great black-backed gulls found in the area surrounding Rampion wind farm may be inflated compared to naturally occurring levels, we advise that it is also reasonable to assume that the construction of Rampion 2 could lead to an even greater number of great black-backed gulls using the area as the attractive effect is increased.	For information only
11	2	10	2.2.6	We observe that the Applicant's reasoning in this paragraph is highly speculative. The maps of monthly survey results in [REP1-035] frequently show great black-backed gulls within the Rampion 1 array area and not just on the edge. We note that in [APP-150], the Applicant describes *"a high density area recorded in and around the Rampion 1 array area"*. We advise that no evidence has been provided to support the assertion that great black-backed gulls generally fly low from the sea to their roosting structures. In[REP1-035] , it was calculated that the median flight height for great black-backed gulls in the survey area was 36m above Mean Sea Level (MSL), which is within collision risk height (note that Natural England does not consider these flight height calculations to be reliable or extensive enough to use in collision risk modelling, but they	We advise that if the Applicant can provide evidence of large gulls using turbine platforms as roosting areas without entering the array or flying at collision risk height, this point may have merit. However, as it stands, we consider that birds using turbine platforms as roosting areas are at risk of collision.

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				nonetheless give a broad indication that the gulls generally do not avoid flying at collision risk height). Anecdotally, Natural England ornithologists have observed large gulls including great black-backed gulls flying up from turbine platforms into the collision risk zone. The Applicant's data effectively demonstrate that significant numbers of gulls are found in very close proximity to the turbine blades and are therefore at risk of collision. It is worth noting that the bird densities used for collision risk modelling already exclude all birds recorded roosting/standing on structures, as only birds in flight are included, so the large numbers of gulls recorded standing on turbine structures do not contribute towards the number of predicted collisions the Applicant has calculated.	
12	2	10	2.2.7	While measures to deter gulls from roosting on turbine platforms could be considered, it is unknown how effective this would be at reducing the numbers of gulls at risk of collision, or at mitigating the possible attractive effect of the array. We understand that spikes can be an effective deterrent, but these are generally placed in locations where people are not expected to go (as they represent a safety hazard), which is not the case for turbine platforms. We acknowledge that barrier tape may be more feasible to install, but	Further consideration of this mitigation measure may be warranted. We question whether the Applicant is aware of any evidence from other existing projects that might aid in informing potential deterrent measures, so as to identify measures that are likely to be effective.

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				gulls are highly adaptable and may habituate to its presence.	
13	3	11	3.1.1	The parameters that Natural England recommend are considered appropriately precautionary given the high levels of uncertainty inherent in collision risk modelling.	We advise that the parameters for collision risk modelling set out in Natural England's interim advice note should be used for estimating the impact of Rampion 2 on GBBG, as was done in the ES Volume 2 Chapter 12 Offshore and Intertidal Ornithology.
14	3	11	3.1.4	Natural England do not accept the use of the great black-backed gull species-specific avoidance rate from Ozsanlav-Harris et al. (2023) due to the quality of the data available. Whilst individually, the large gull species had data to estimate avoidance rates from up to 12 sites, the data quality across those sites is variable. Individual species avoidance rates are rather similar (Tables 2 – 5 Ozsanlav-Harris et al. 2023), as expected from these biologically similar species, particularly for the Basic Band model. We therefore recommend use of the amalgamated 'large gull' rate for each of these species.	We advise that for the reasons given, it is not appropriate to use alternative avoidance rates from those advised by Natural England, and that the parameters used in the ES are appropriate.
15	3	12	3.1.5	Natural England advise that in general, caution must be used when proposing alternative parameters for collision risk modelling to those recommended by the SNCBs, due to the way avoidance rates are calculated. The calculation of	We advise that it is not appropriate to use an alternative flight speed to that advised by the SNCBs.

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				avoidance rates involves a comparison of how many collisions are predicted by the model, in the absence of avoidance and using given parameters, with real-world collision data collected from wind farms. If the model parameters are changed so that fewer collisions are predicted in the absence of avoidance, then a lower avoidance rate may also be warranted - the smaller the gap between predicted (without avoidance) and observed collisions, the lower the avoidance rate. The SNCBs are currently reviewing some of the recommended parameters for collision risk modelling, which may lead to some changes, but currently Natural England do not consider it appropriate to use a different flight speed to the recommended value as an input for sCRM, for the reasons stated above. However, we do recognise that data collection on flight speed and nocturnal activity of various seabird species is yielding further insights into seabird behaviour, and therefore it is reasonable for the Applicant to have explored the influence of different values.	
16	3	15	3.3.2	We advise that the information regarding the behaviour of great black-backed gulls in the array area presented is not substantiated by robust evidence. We advise that the Applicant's survey results clearly show great black-backed gulls within the Rampion 1 array area. Even if gulls were	We advise that the collision risk modelling figures presented by the Applicant in the ES would be more appropriate figures to consider for the impact assessment.

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				mainly using the periphery of the array, the fact remains that they are spending significant periods in close proximity to the turbines and are therefore at risk of collision. We therefore do not consider that this report provides justification for using a lower avoidance rate for collision risk modelling.	
17	3	16	3.3.4	Regarding the cumulative impact assessment, Natural England's advice is that the largest bio-season population for each species should be used as the reference population for annual EIA-scale impacts. In the Offshore Ornithology chapter, the Applicant presented their own method for calculating the breeding season population, alongside what they consider to be Natural England's position. Natural England's method is to sum the populations of all breeding colonies within the relevant Biologically Defined Minimum Population Scales (BDMPS) region for that species, as defined in Furness (2015). The Applicant has chosen also to include overseas birds in the relevant breeding populations, which Natural England does not consider to be appropriate. Furthermore, we do not agree with the population the Applicant has calculated using our method either. This is due to a quirk in the appendix of Furness (2015), where tables are provided listing colony sizes for UK SPAs, plus an aggregated	We advise that the impacts from the Project alone and cumulatively with other projects should be assessed using the South-west UK and Channel non-breeding BDMPS population of 17,742 individuals as the reference population.

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				number for non-SPA colonies. In most cases these non-SPA colonies are presented for each relevant BDMPS region, but for GBBG a total figure for all western UK colonies is presented, covering both the "*West of Scotland"* and "*Southwest UK and Channel"* BDMPS regions. Since the majority of the western non-SPA colonies are found in the west of Scotland, using this figure to create a *"Southwest UK and Channel"* breeding season reference population leads to a vast overestimation. In this instance, Natural England recommends that the non-breeding season BDMPS population for GBBG for SW UK & Channel is used, which is 17,742. Using this reference population, rather than the far larger one proposed by the Applicant, would more accurately reflect the potential cumulative effects on the relevant population. We also reiterate that the cumulative assessment presented contained numerous data gaps and therefore cannot be considered to be comprehensive.	

3. References

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