Ein cyf/Our Ref: AOS-21167-0032
Eich cyf/Your ref: EN010137
Our Unique Ref: 20048445

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Dyddiad/Date: 27 August 2024

Er sylw / For the attention of: Jake Stephens

Annwyl / Dear Jake,

FFERM WYNT ALLTRAETH MONA / PROPOSED MONA OFFSHORE WINDFARM

CYFEIRNOD YR AROLYGIAETH GYNLLUNIO / PLANNING INSPECTORATE REFERECE: EN010137

EIN CYFEIRNOD / OUR REFERENCE: 20048445

RE: NATURAL RESOURCES WALES' DEADLINE 2 SUBMISSIONS

Thank you for your Rule 8 letter, dated 23 July 2024, requesting Cyfoeth Naturiol Cymru / Natural Resources Wales' comments regarding the above.

Please find below Cyfoeth Naturiol Cymru / Natural Resources Wales' Advisory comments on submissions produced by the Applicant and received at Deadline 1 on 07 August 2024.

With respect to the Deadline 1 submissions, NRW (A) have considered the following documentation submitted by Mona Offshore Wind Limited (the Applicant):

- REP1-037 Deadline 1 Submission - S_D1_25 Offshore Ornithology Assessment of Pen y Gogarth & Great Orme's Head SSSI F01 Written Representations
- REP1-044 Deadline 1 Submission - S_PD_1 Errata Sheet F02

The comments provided in this submission, comprise NRW's response as a Statutory Party under the Planning Act 2008 and Infrastructure Planning (Interested Parties) Regulations 2015 and as an 'Interested Party' under s102(1) of the Planning Act 2008.

Our comments are made without prejudice to any further comments we may wish to make in relation to this application and examination whether in relation to the Environmental Statement (ES) and associated documents, provisions of the draft Development Consent Order ('DCO') and its Requirements, or other evidence and documents provided by bpENBW ('the Applicant'), the Examining Authority or other Interested Parties.

Should further clarity be required, we will be pleased to answer these further through the Examining Authority questions and / or a Rule 17 request(s).

Please do not hesitate to contact Emma Lowe ( ) Nia Phillips ( ) and Siôn Williams ( ) should you require further advice or information regarding these representations.

Yn gywir / Yours sincerely,

Andrea Winterton
Marine Services Manager
Natural Resources Wales

[CONTINUED]

Contents

1 Response to Errata Sheet

1.1 Marine Mammals

We note within the Errata Sheet (REP1-044), at page 5, paragraph 4.9.5.22, that the Applicant has changed text within APP-056 from "*Multiplying the area of ensonification by each species-specific density would lead to unrealistic estimates, as serious disturbance would not occur over ranges such as **23 km***." to "*Multiplying the area of ensonification by each species specific density would lead to unrealistic estimates, as serious disturbance would not occur over ranges such as **4.08 km***."

Further to this edit, NRW(A) notes that we can no longer fully agree with the rationale provided for the decision not to calculate number of animals disturbed from vessel noise. Here the Applicant states that estimates based on an impact range derived from the Applicant's noise modelling, and corroborated by evidence provided by the Applicant which indicates that disturbance has been observed at ranges of up to 7 km, would be unrealistic.

We agree with the Applicant that a proportion of animals would be disturbed within the impact radius as this is a statement clearly borne by the evidence (e.g. Joy et al. 2019; Benhemma le Gall et al. 2021) and knowledge of the probabilistic nature of animal responses. We also agree that the background noise level in an area may occasionally exceed the threshold level of 120 dB SPL_{rms}, which would reduce the overall impact radius. However, we do not agree that this supports the decision not to carry out an estimation of the numbers disturbed. We believe that a stronger argument could be made for either of two alternative approaches: (1) calculate numbers disturbed using the 4.08 km impact radius and present this as an absolute worst case scenario, (2) calculate the numbers using refinements obtained from the literature, (e.g -24% at 3 km Benhemma le Gall et al. 2021) assuming that a percentage / proportion of animals within the impact radius would be disturbed rather than 100%.

While we would not expect this to have a material effect on the overall conclusions given the mitigation measures proposed, strong justification should be provided to clarify why approaches such as those discussed above were not taken.

1.2 Marine Ornithology

Given the numbers of errors identified by NRW (A), other interested parties, and the Applicant themselves across the multiple offshore ornithology related submission documents, together with the concerns NRW (A) have raised regarding the implications these errors may have on the assessments within the Environmental Statement (ES) and Habitats Regulation Assessment (HRA), we agree with the Applicant that updated versions of these documents should be submitted by the Applicant into the examination. We welcome the Applicant's commitment to provide updated versions (tracked and clean) of these documents at Deadline 2. We suggest that these documents should rectify these errors, including all of those identified in the Errata list [REP1-044] and any further errors noted in our Written Representations [REP1-056] and those of other interested parties. We also recommend that the impact assessments are updated accordingly to take account of these errors. We note the request by the Examining Authority (ExA) in their Rule 17 letter of 15th

August 2024 for the Applicant to provide by no later than Deadline 3 '*an additional submission consisting of an assessment of effects on ornithological features (for both the EIA and HRA) using the methods and parameters highlighted by NRW(A) and JNCC during pre-application consultation, and in their relevant representation [RR-011; RR-033] and written representations [REP1-056; REP1-066 and REP1-067]'*. Therefore, we will provide further advice following detailed review of these updated assessments once they are submitted into the examination by the Applicant.

We understand that the Applicant is working on an updated cumulative effects assessment approach to 'gap fill' for historical projects where data are unavailable and note that the Applicant plans to discuss this with NRW (A), Natural England and JNCC in a call scheduled for 29th August 2024. We also note the ExA request in their Rule 17 letter of 15th August 2024 that the Applicant's additional submission requested by Deadline 3 '*should include an in-combination assessment using the SNCB's proposed methodology for gap-filling for historic projects*.' Therefore, we will provide further advice, including regarding levels of significance of cumulative and in-combination impacts, following detailed review of these assessments once they are submitted into the examination by the Applicant.

2 Comments on Offshore Ornithology Assessment of Pen y Gogarth / Great Orme's Head SSSI [REP1-037]

2.1 Key Comments

We welcome that the Applicant has now submitted a detailed quantitative assessment of impacts of the Mona project alone on the kittiwake, guillemot and razorbill features of the Pen y Gogarth / Great Orme's Head SSSI. This was advised to be undertaken by NRW (A) in both our Relevant Representation [RR-011], and with further detail on this request provided in our Written Representation [REP1-056]. The Applicant's assessment document was submitted ahead of submission of our Written Representation and hence produced before the further detail in REP1-056 was available. As a result, there are some aspects of the assessment approach that we have concerns/queries regarding, or that we would not agree with/advise are undertaken:

- Non-breeding season age class apportioning (see **Section 2.2.1** below).
- Calculation of non-breeding season apportionment rates to the Pen y Gogarth / Great Orme's Head SSSI (see **Section 2.2.1** below).
- Concerns regarding the foraging ranges used for guillemot and razorbill (as raised by JNCC in their Written Representations, REP1-066, with which we agree) and potential implications of this for the breeding season apportionment rate calculations for the Special Site of Scientific Interest (SSSI) (see **Section 2.2.2** below).
- Kittiwake seasonal definitions and calculations of Environmental Impact Assessment (EIA) scale seasonal collision totals used in calculating seasonal collision impacts to the SSSI (see **Section 2.2.3.1** below).
- Need to consider and present displacement impacts across the full range of SNCB advised % displacement and % mortality rates for auk displacement assessments and where predicted impacts equate to 1% or more of baseline mortality of the colony to give further consideration through Population Viability Analysis (PVA) (see **Sections 2.2.3.2** and **2.2.3.3** below).

- Need to undertake a cumulative assessment of impacts as well as assessment of project alone impacts (see **Section 2.2.4** below).

Further information on each of these issues is set out in our detailed comments below.

2.2 Detailed Comments

2.2.1 Non-breeding season apportionment of impacts, including age classes (relevant to all three features of the SSSI)

For the assessment of impacts to the Pen y Gogarth / Great Orme's Head SSSI, the Applicant has taken the same approach to apportioning impacts to adults in the non-breeding season as taken for Special Protection Area (SPAs) in their submission documents, i.e. to use a theoretical generalised stable age structure (Furness 2015) to apportion impacts to adults in the non-breeding season from the SSSI. It also appears that in the approach undertaken by the Applicant in REP1-037, the Applicant has taken the same approach as used for SPAs in their submission of taking the EIA scale all age class collision figure/abundance figure for displacement for the non-breeding season(s) and applied an apportionment rate for proportion of adults (based on stable age structure from Furness 2015) and an apportionment rate for proportion of adult birds within the relevant seasonal Biologically Defined Minimum Population Scale (BDMPS). As noted in our Relevant Representations [RR-011] and Written Representations [REP1-056], we did not agree with these approaches regarding SPAs, and again note here that the Applicant's approach essentially double apportions to adults as the BDMPS proportions in the tables in Appendix A of Furness (2015) already takes account of the number of adults likely to be present in the BDMPS, so it is not appropriate to correct (a second time) for the proportions of adults (or adult type in the case of kittiwake) in the BDMPS. Therefore, we recommend that no age class apportionment is undertaken for the non-breeding season(s) and that the apportionment to the SSSI for the non-breeding season(s) is undertaken based on the proportion of the SSSI adult birds (we suggest this is based on use of the adult proportion of birds for the UK western non SPA colonies in the Furness 2015 Appendix A tables rather than Rathlin Island SPA; as was done at Awel y Môr) across the BDMPS total of birds of all ages for each relevant non-breeding BDMPS season.

However, we do note that in this case, as the numbers of birds involved are small, our preferred approach to non-breeding season age class apportionment and apportionment method to the SSSI does not result in significant differences in the adult abundances of birds (auks) or adult densities (kittiwake) apportioned to the site in terms of annual totals. However, this may not be the case for other offshore wind development sites where higher numbers/densities of birds are recorded. Therefore, we would not advise that the approach the Applicant has taken to apportioning non-breeding season impacts to SSSI colonies is followed by other projects where assessment of impacts to SSSI breeding seabird colonies is required.

2.2.2 Breeding season apportionment (guillemot and razorbill)

With regard to the breeding season apportionment rate calculations for the Pen y Gogarth / Great Orme's Head SSSI colony of 15.6% for guillemot and 21.1% for razorbill, we are content with the use of the NatureScot apportionment tool to calculate these. However, we note the concerns raised by JNCC in their Written Representations [REP1-066] regarding

the guillemot and razorbill foraging ranges used by the Applicant and the uncertainties this has on the calculated apportionment rates to colonies (with which we agree – note the advised foraging ranges, to which NRW (A) agreed, were provided by JNCC to the Applicant following EWG5, see Section D.6.2 of Appendix D of the technical engagement plan, E4.1). Therefore, further information is required from the Applicant as to whether this issue would alter the breeding season apportionment rates to this colony for these two features.

2.2.3 Species assessments

2.2.3.1 Kittiwake assessment

We welcome that in this assessment that the Applicant has followed NRW (A)'s recommendation in our Relevant Representations [RR-011] to use a breeding season adult rate of 95.2% for age class apportionment (i.e. to take a precautionary approach of assuming that all adult type kittiwakes recorded in the site-specific surveys in the breeding season are adults).

We are content with the approach used to calculate the 15.6% apportionment value for use for apportioning impacts to the colony in the breeding season (as set out in the apportioning technical report, APP-095). However, we do not agree with the approach taken for apportioning in the non-breeding seasons for the reasons set out in Section 2.2.1 above, although we note that this does not result in a significant difference to the number of apportioned collisions to the site.

We welcome that the Applicant has presented predicted impacts from collision and displacement impacts separately in Table 1-2 of REP1-037. This is because, as noted in our Written Representations [REP1-056], NRW (A) does not recommend that displacement is assessed for kittiwake as we currently consider the evidence base to be insufficient (as advised to the Applicant at PEIR). Hence, we have not provided advice/comment on the displacement aspect of the kittiwake assessment and will base our advice on the predicted collision impacts only for this species.

In PDA-008, the Applicant's response to Relevant Representations (specifically response to reference RR-011.3), the Applicant has indicated that they have taken an approach for kittiwake collision of splitting in half the monthly collision estimates for April and August and applying these across two seasons (April: half in pre-breeding/spring migration and half in the breeding season; August: half in breeding season and half in post-breeding/autumn migration). From the results presented in Table 1-2 of REP1-037 it appears that this approach has again been taken in the assessment of kittiwake collision to Pen y Gogarth / Great Orme's Head SSSI. However, clarification is required from the Applicant as to whether this is the case. If this approach has been taken, as noted in our Written Representations [REP1-056], this approach of splitting monthly collision impacts across two different seasons was not discussed during the EWG and it is unclear why the months above have been split across seasons for kittiwake as from Table 5.14 of the Offshore Ornithology Chapter [APP-057], the seasonal definitions for this species do not have any months where part falls in one season and another in another season. Furness (2015) defines the full breeding season for kittiwake as March-August, we would advise this definition is used and then adjusting the non-breeding season definitions in Furness (2015) accordingly to ensure no months are considered in two seasons. If the approach of splitting collision estimates from one month across multiple seasons has been taken in this assessment, then we advise the Applicant

reconsiders its EIA seasonal collision predictions for kittiwake and hence any apportioned collision impacts to the SSSI (as per our advice in our Written Representations, REP1-056).

As noted in our Relevant Representations [RR-011] and Written Representations [REP1-056], NRW (A) will base our advice on collision impacts based on the stochastic Collision Risk Modelling (sCRM) outputs using the specific input parameters as provided by Natural England (and agreed by NRW (A)) during the Expert Working Group (EWG), including use of the species-group avoidance rates – in the case of kittiwake this is the all gull rate of 0.9928 ± 0.0003. As was advised to the Applicant by the SNCBs (NE/NRW/JNCC) during the EWG this is because paucity of offshore, species-specific data undermines the confidence we can place in species-specific rates at this stage, and hence we currently recommend that the species group avoidance rates are used in assessments. We acknowledge and welcome that the Applicant has presented in Table 1-2 of REP1-037 the predicted collision figures for kittiwake at the Pen y Gogarth / Great Orme's Head SSSI for both the NRW (A) advised species-group avoidance rate and the Applicant's preferred species-specific avoidance rate. However, we note our comments above regarding the approaches to the non-breeding season apportionment of impacts to the SSSI and to the seasonal definitions/split of monthly collision estimates above and therefore, await clarification and/or further updates from the Applicant regarding this before we can make further comment on the significance of collision impacts on the kittiwake feature of the SSSI.

2.2.3.2 Guillemot assessment

We do not agree with the approach taken for apportioning in the non-breeding seasons (see Section 2.2.1 above), although we note that this does not result in a significant difference to the apportioned abundance of birds to the site in the non-breeding season.

As noted in Section 2.2.2 above, we are currently unclear as to whether the issues raised by JNCC with the guillemot foraging ranges used by the Applicant (with which we agree) will have implications for the breeding season apportionment rate to the SSSI colony, and hence further information is required from the Applicant regarding this aspect.

We note that it is unclear as to how the Applicant has calculated the baseline mortality figure of 457.87 for guillemot at Pen y Gogarth / Great Orme's Head SSSI presented in Table 1.3 of APP-095 – based on using a colony size of 3,578 adults (as presented in Table 1.3 of APP-095, which we assume is based on the 2023 Seabird Monitoring Programme (SMP) count), we calculate the baseline mortality of the colony to be 218 birds (using adult mortality rate as we have advised in our Relevant Representations, RR-011). This has implications for the % baseline mortality that the predicted apportioned impacts across the range of advised rates equates to and where within this range the predicted impacts exceed 1% of baseline mortality – for example for the Applicant's preferred rate of 50% displacement and 1% mortality:

- if the baseline mortality of 458 birds (as presented by the Applicant in APP-095) is used, then the predicted annual mortality to the SSSI equates to less than 1% of baseline mortality. However,
- if the baseline mortality of 218 birds (as calculated by NRW (A)) is used, then the predicted mortality for this range equates to greater than 1% of baseline mortality at 1.37%, which requires further consideration.

We advise the Applicant revisits their calculations of baseline mortality for this species at this colony and is clear as to how they have calculated this (i.e. to present the colony size and year of count and the mortality rate the calculation is based on). We also suggest that the Applicant includes a table of annual predicted displacement mortalities across the range of advised % displacement and % mortality rates that highlights where across this range the predicted annual impacts equate to 1% or more of baseline mortality.

2.2.3.2.1 Pen y Gogarth / Great Orme's Head SSSI guillemot PVA

We acknowledge that in the submission, the Applicant had run a PVA for guillemot at the Pen y Gogarth / Great Orme's Head SSSI (see the PVA technical report, APP-095). We note this was run for the breeding season apportioned impacts to the colony only and for impact scenarios of 30% displacement and 1% mortality, 50% displacement and 1% mortality, and 70% displacement and 10% mortality (so covered the worst- and best-case scenarios of the NRW (A) advised range and the Applicant's preferred rates). Whilst the Applicant has not re-run the PVA to cover the full annual predicted impacts, we do acknowledge that the non-breeding season apportioned impacts are very small and would add a marginal increase to the breeding season impacts. Therefore, we consider that there is unlikely to be a need to re-run any PVA to account for the full annual impacts as this would not make a material difference to the outcomes of the impact assessment.

We have reviewed the input parameters used by the Applicant in the PVA (as set out in Section A.1.1 of Appendix A of APP-095). We note that the standard deviations (SDs) used for the survival rates for the immature age classes are in fact the standard errors (SEs) presented for these age classes in Horswill & Robinson (2015). Whilst SD and SE are different, we do not believe that this error should materially alter the median counterfactuals of growth rate and population size output by the PVA tool and as presented in Table 1.9 of APP-095, but has the potential to affect the simulated population sizes as presented in Table 1.9 of APP-095.

However, we are currently unclear as to the source and years of the productivity rate of 0.532 (SD 0.089) used by the Applicant in the PVA. This is because this does not appear to fit with any of the pre-populated rates in the PVA tool for this species and nor does it appear to fit with any of the guillemot productivity rates listed in Horswill & Robinson (2015). Clarification is required on this from the Applicant before agreement to be reached on whether a suitable rate has been used in the PVA model, noting that for the Awel-y-Môr models NRW (A) advised the Applicant to use the national rates in Horswill & Robinson (2015).

2.2.3.3 Razorbill assessment

We do not agree with the approach taken for apportioning in the non-breeding seasons (see **Section 2.2.1** above), although we note that this does not result in a significant difference to the apportioned abundance of birds to the site in the non-breeding season.

As noted in **Section 2.2.2** above, we are currently unclear as to whether the issues raised by JNCC (with which NRW (A) agree) with the razorbill foraging ranges used by the Applicant will have implications for the breeding season apportionment rate to the SSSI colony, and hence further information is required from the Applicant regarding this aspect.

We note that, as the Applicant presents in REP1-037, at the worst-case scenario of 70% displacement and 10% mortality the predicted impact exceeds 1% of baseline mortality. However, the Applicant again relies solely on the predicted impacts for its preferred range of 50% displacement and 1% mortality to reach its conclusion that no PVA is required for impacts to this feature and there would be no detectable impact from the project alone on the razorbill population of the Pen y Gogarth / Great Orme's Head SSSI. As has been advised during our Relevant Representations [RR-011] and in our Written Representations [REP1-056], NRW (A) consider that predicted impacts across the full range of advised % displacement (30-70%) and % mortality rates (1-10%) should be presented and considered. Sections 2.1.2.4.1 and 2.1.2.4.4 of our Written Representations [REP1-056] provide details for why NRW (A) consider that a range of % displacement and % mortality rates are appropriate to consider for assessing displacement impacts to auks. Therefore, we recommend that the Applicant includes presentation of the full annual matrix of predicted impacts, which highlights where across the range the annual predicted impacts equate to 1% or more of baseline mortality of the colony. We also note the advice above (and provided previously to the Applicant in the EWG and in our Written Representations REP1-056) that where the predicted annual mortality equates to 1% or more the baseline mortality of the colony, then further consideration is required through PVA. NRW (A) would be happy to provide advice to the Applicant on PVA input parameters for razorbill.

2.2.4 Cumulative Effects

We also suggest that the Applicant considers assessment of impacts to the SSSI of the Mona project cumulatively with other plans and projects. This is particularly as the Awel-y-Môr, Morgan generation assets and Morecambe generation assets projects are all located within foraging range of all three features of the Pen y Gogarth / Great Orme's Head SSSI.

3 References

Horswill, C. & Robinson, R. (2015). Review of seabird demographic rates and density dependence. JNCC Report 552, JNCC, Peterborough, ISSN 0963-8091.