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JNCC Reference: OIA-10448
JNCC Registration ID Number: 20048439
PINS Reference: EN010137
Date: 30 September 2024

By email: monaoffshorewindproject@planninginspectorate.gov.uk

To whom it may concern,

Mona Offshore Wind Project Development Consent Order Application – Environmental Statement and Management Plans – EN010137 –

Response to Applicant's comments (REP2-081) on JNCC's Written Representation (REP1-066)

Thank you for consulting JNCC on the Mona Offshore Wind Project Development Consent Order (DCO) Application including the Environmental Statement (ES) and Management Plans.

The advice contained within this minute is provided by JNCC as part of our statutory advisory role to the UK Government and devolved administrations on issues relating to nature conservation in UK offshore waters (beyond the territorial limit). We have consequently concentrated our comments on aspects of the documents that we believe relate to offshore waters, and defer to comments provided by Natural Resources Wales Advisory (NRW (A)) for aspects relating to inshore waters and Natural England (NE) where appropriate.

The advice below responds to the Applicant's comments in Table 2.1 of document REP2-081 which itself is a response to the Written Representation submitted by JNCC (REP1-066). JNCC's comments relate to marine ornithology and offshore benthic ecology and is captured under the following headings:

- Marine ornithology comments
- Benthic ecology (offshore) comments

JNCC have reviewed and noted the Applicant's responses to our written representations regarding marine mammals. The remaining area of disagreement relates to the inclusion of unexploded ordnance (UXO) in the DCO/deemed marine license. As the Examining

Authority have asked a question regarding this (PD-013), we have responded to that rather than to the Applicant's responses to our written representations.

Marine ornithology comments

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.1	Marine ornithology comments Overall comments 1. We disagree with several approaches the Applicant has taken to the assessment of offshore ornithology within the Environmental Statement and the HRA. In addition, there are multiple errors within the tables and text of the application documentation and errors when using values in subsequent stages of the assessment, and many aspects of the assessment have been difficult to follow in terms of what has been done or where parameters used have come from. Therefore, JNCC currently does not have confidence in the results, nor are we able to agree with the overall conclusions, either within the EIA or the HRA, particularly with regards to *Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro Special Protected Area (SPA)*.	The Applicant notes the JNCC's comment and has responded in the table below in relation to the specific points raised. The Applicant also refers JNCC to its Response to the Examining Authority's Rule 17 Letter (S_D2_2), which sets out the overall approach proposed by the Applicant to addressing inconsistencies in the application material, requests for clarification and the submission of additional information in accordance with the advice provided by Natural Resources Wales (NRW) and the JNCC within their Relevant Representations (RR-011 and RR-033, respectively) and Written Representations (REP1-056 and REP1-066/REP1-067, respectively).	As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). In general terms we welcome the response of the Applicant, and look forward to commenting on the revised assessments in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.2	2. Further, aspects of JNCC advice appear to have been misinterpreted, for instance foraging values and agreements and disagreements on breeding Biologically Defined Minimum Population Scales (BDMPS) reference populations. Some aspects of JNCC advice also appear to have been taken on board in some circumstances but not in others, despite agreement during pre-application meetings and correspondence. For instance, specific displacement rates being used in the HRA and EIA. We highlight these disagreements, errors, and unclear aspects in detail below. We have identified errors to the best of our ability with the time available, but this may not be an exhaustive list of all errors, and we recommend that a full and thorough check of all tables and in-text values is conducted. We note that it is stated in several places in the Applicant's Response to Relevant Representations (PDO-008) that various elements of the application have been checked and are either correct or will be included in the Errata	The Applicant acknowledges the JNCC's comments and has responded to specific points below.	JNCC has commented on each of the responses made by the Applicant in the table below.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	document to be submitted at Deadline 1. We look forward to receiving and reviewing the Errata document.		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.3	3. Please note that JNCC can only comment on sites for which we have jurisdiction (UK marine sites wholly or partly in waters beyond 12nm). We note that NRW and Natural England (NE) have been involved in pre-application discussions and defer to those agencies on their respective sites. We also note that a number of SPAs in Irish and Scottish waters are screened in at Likely Significant Effect (LSE), and recommend consultation with the relevant nature conservation advisers. There is a risk of not receiving advice on specific SPAs within other nations, or on the UK Marine Protected Area (MPA) network if the relevant SNCBs are not consulted.	The Applicant acknowledges the JNCC's comment.	This is noted.
REP1-066.4	Presenting SNCB recommended approaches to assessments in Application documentation 4. We recommend that the applicant presents both their preferred approach and JNCC's advised approach	The Applicant acknowledges the JNCC's comment and notes that the Examining Authority issued a Rule 17 letter to the Applicant, Natural Resources Wales and the Joint Nature Conservation Committee on 15 August 2024 regarding the examination of the Mona Offshore Wind Project development consent order application. This included, among other things, a request for the Applicant to "*provide additional submission*	(this comment provides JNCC's response to the Applicant's responses set out at REP1-066.4 and REP1-066.5 of Table 2.1). As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). In general terms,

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	throughout the EIA/HRA. To that end JNCC notes the instruction to the Outer Dowsing Offshore Wind Project by the Examining Authority in that Examination in their Rule 17 letter dated 3rd July 2024 (Macarthur, 2024), requesting the same. a. "The ExA appreciates that the Applicant may not entirely agree with the preferred methodological approaches on some matters that have been referenced in the RRs from NE [RR-045], the Marine Management Organisation [RR-042] the RSPB [RR-056] and the Environment Agency [RR-018]. Nevertheless, where differences of opinion have been detailed in the aforementioned RRs the ExA considers it to be very important that it is presented with assessment outputs based on the methodological approach adopted by the Applicant as well as the approach respectively advocated by these organisations, and which make use of the most up to date data available to the Applicant."	*consisting of an assessment of effects on ornithological features (for both the EIA and HRA) using the methods and parameters highlighted by NRW (Advisory) and JNCC during preapplication consultation, and in their relevant representation [RR-011; RR-033] and written representations [REP1-056; REP1-066 and REP1-067]*". Please see the Applicant's response with respect to this point within the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2.	we welcome the Applicant's response, and look forward to commenting on the revised assessments in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.5	5. Therefore, we recommend that the approaches and parameters that we advise should be used are presented and taken through the impact assessment in the EIA and the HRA. This also includes approaches and parameters which we understood to have been previously been agreed between JNCC and the applicant during pre-application consultation, but which, in the application documents submitted to date, go against that previous agreement.		
REP1-066.6	Updating Application Documentation (ES, HRA, and associated documents and appendices) 6. As highlighted in our Relevant Representations (RR-033) and in our overall comments on offshore ornithology above, JNCC has a number of issues of concern in the current application documentation. We note that in response to our Relevant Representations, the Applicant has accepted that errors were made in these assessments and undertakes to produce an Errata document	The Applicant acknowledges that discrepancies have been identified in the application material in relation to offshore ornithology. As stated in the Applicant's Response to Relevant Representations (PDA-008), these discrepancies were included in the Errata Sheet submitted at Deadline 1 (REP1044). As outlined in paragraph 1.1.1.4 of the Errata Sheet (REP1-044), the Applicant confirmed that updated versions (tracked and clean) of the offshore ornithology application material would be provided at Deadline 2 to address the errata presented in the Errata Sheet (REP1-044). The Applicant confirms that the following application documents have been updated and submitted at Deadline 2 to address the errata presented in the Errata Sheet (REP1-	(this comment provides JNCC's response to the Applicant's responses set out at REP1-066.6, REP1-066.7, REP1-066.8 and REP1-066.9 of Table 2.1). As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077).

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	highlighting where errors have been made and the correct values that should have been used. JNCC welcomes this.	044) and any further discrepancies considered to be errata identified in NRW's and the JNCC's Written Representations (REP1-056; REP1066/REP1-067, respectively): • Volume 2, Chapter 5: Offshore ornithology (F2.5 F02); • Volume 6, Annex 5.2: Offshore Ornithology displacement technical report (F6.5.2 F02); • Volume 6, Annex 5.3: Offshore Ornithology collision risk modelling technical report (F6.5.3 F02); • Volume 6, Annex 5.5: Offshore ornithology apportioning technical report (F6.5.5 F02); • Volume 6, Annex 5.6: Offshore ornithology population viability analysis technical report (F6.5.6 F02); • HRA Stage 1 Screening Report (E1.4 F02); • HRA Stage 2 Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02); and • HRA Integrity Matrices (E1.5 F02). This approach outlined above has ensured discrepancies have been worked through the relevant EIA and HRA application material and any potentially compounding effects have been identified and corrected to ensure that assessments and conclusions presented are evidenced and remain robust. The Applicant can confirm that the	
REP1-066.7	7. Whilst we welcome the Applicant's response to this issue, we are concerned that providing an update in this manner risks updated assessment parameters and impact totals not being readily available for use in the in-combination/cumulative assessments of future proposed projects. To illustrate this risk, we note that the Applicant themselves had difficulty in obtaining impact totals from other projects where updated parameters have been contained in supplemental documentation submitted to Examination rather than the original ES (see comments in paragraphs 64 to 65 below, where updated totals for the Erebus project were contained in a supplemental document submitted to Examination, rather than and updated ES).		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.8	8. We are therefore concerned that any revisions to Mona OWF parameters/outputs would be similarly difficult to find for cumulative/in-combination assessments by future projects were they to be contained in a separate document submitted to Examination and advise that updated Application documentation is produced (ES, HRA and associated documentation/appendices).	amendments made to the application documents outlined above do not change the conclusions presented. Further information regarding the above can also be found in the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) and the Schedule of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) submitted at Deadline 2.	
REP1-066.9	Multiple, potentially compounding errors 9. JNCC noted in our Relevant Representations (RR-033) that multiple errors have occurred within the assessments for the same SPA/qualifying feature. We are concerned that these errors have been considered individually (see Applicant's responses to our Relevant Representation comments (PDA-008)) without an overview of how these errors may compound at each stage of an assessment.		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.10	10. By way of illustration the assessment of displacement impacts for Atlantic Puffin has errors in: • Incorrect Mean Seasonal Peak • Not presenting the full range of displacement and mortality rates from the displacement matrix • Incorrect foraging ranges • Incorrect apportioning of impacts to adults and immatures during the non-breeding season • Incorrect apportioning of impacts to SPAs (Applicant's response to our Relevant Representation (PDA-008) is that "no SPAs are located between 250.8 and 265.4 km, and therefore, no SPAs have been excluded that should have otherwise been included in the assessments." However, the Skomer, Skokholm and Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA occurs within this distance to the proposed Project, of which breeding Atlantic puffin is a qualifying feature. In addition, there are multiple other SPAs	The Applicant acknowledges the JNCC's comment and the points raised in relation to Atlantic puffin. Please see the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 as this is relevant to the Atlantic puffin and black-legged kittiwake examples given by the JNCC. The Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) sets out the overall approach proposed by the Applicant to addressing inconsistencies in the application material, requests for clarification and the submission of additional information in accordance with the advice provided by NRW and the JNCC within their Relevant Representations (RR-011 and RR033, respectively) and Written Representations (REP1-056 and REP1066/REP1-067, respectively). The Applicant maintains that the JNCC has misinterpreted how Atlantic puffin has been considered within the HRA Stage 1 Screening (E1.4 F02). See row RR-033.31 of the Applicant's Response to Relevant Representations (PDA008), which confirms that there are no SPAs between 250.8 and 265.4km, which could have been excluded from the application documents. Table 1.9 of HRA Stage 1 Screening (E1.4 F02) sets out the SPAs considered and includes all of the SPAs referenced by the JNCC for Atlantic puffin. These sites were all included at the point of application. For clarity, Atlantic puffin has not been presented in Volume 2, Annex 5.5: Offshore Ornithology Apportioning Technical	This issue was discussed with the Applicant during the Mona Offshore Wind Project & JNCC Monthly Meeting on 4th Sept 2024. We are satisfied that the HRA screening has identified the relevant SPAs that fall within the foraging range of Atlantic puffin (Table 1.9 of HRA Stage 1 Screening [APP-034]). However, we do not agree that the Applicant can screen out of further assessment, particularly in-combination, on the basis that the predicted mortalities are low (up to 3 annually). This approach is inconsistent with the Applicant's own approach to taking site features through to Appropriate Assessment, i.e. to apportion impacts to relevant SPAs using the NatureScot methodology, and taking those site/feature combinations where apportioned impacts are greater than 0.0 through to Appropriate Assessment. We note that this is the approach taken for lesser black-backed gull and herring gull where predicted annual un-apportioned mortalities are less than 2 in both cases. In addition we remain concerned that a gap-filling exercise could reveal significantly more mortalities for this species than anticipated. There is therefore the potential that not screening in Atlantic puffin and not completing a gap-filling exercise for this species risks the implications of the project not being fully considered.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	within foraging range of the Mona Array, for instance Lambay Island SPA, Rathlin Island SPA, and Saltee Islands SPA.	Report (F6.5.5 F02) due to the updated impacts still not requiring apportioning to individual SPAs. The corrected annual impact on Atlantic puffin from displacement was 0 (0 to 2) birds (30% displacement to 1% mortality to 70% displacement to 10% mortality). Considering the maximum impact on Atlantic puffin is 2 birds annually, inclusion in the apportioning report was not deemed necessary.	
REP1-066.11	11. Similarly, the collision impacts on black-legged kittiwake has errors in: • Incorrect seasonal collision mortality estimates • Not presenting the full range of displacement/mortality within the displacement matrix • Incorrect apportioning of impacts to adults and immatures in the bereding season • Incorrect apportioning of impacts to adults and immatures during the non-breeding season		
REP1-066.12	12. We illustrate this point in the two tables below with an example of the compounded differences in parameters used at different stages, for black-legged kittiwake qualifying feature of Rathlin Island SPA. The differences between JNCC's recommended	The Applicant notes and welcomes the worked example for black-legged kittiwake presented by the JNCC within Table 1 and Table 2 of JNCC's Written Representation (REP1-066). Please see the Applicant's response to REP-066.6 to REP1-066.11 above. As outlined in the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2, the Applicant intends to provide additional information in	As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	approach (Table 1) and that taken by the Applicant (Table 2) are in the seasonal definitions, the displacement and mortality rates, the breeding season age class apportioning, and the non-breeding season age class apportioning, which ultimately results in very different seasonal and annual apportioned adult mortalities. It is therefore difficult to know whether this would result in impacts greater than 1% baseline mortality for any feature of any SPA and hence whether an SPA feature should have been taken through to Population Viability Analysis (PVA). On the basis of this, we do not currently consider that a sound conclusion of no AEOSI can be made. In addition, updated outputs should be provided in updated application documentation (ES, HRA and associated documentation/appendices) so that they are available for cumulative and in-combination assessments of future projects.	accordance with the advice provided by NRW and the JNCC within their Relevant Representations (RR-011 and RR-033, respectively) and Written Representations (REP1-056 and REP1-066/REP1-067, respectively) for examination at Deadline 3. The Applicant intends to engage with both NRW and the JNCC to seek further guidance on how best to present the information requested in order to provide additional clarity with respect to the Applicant's assessment approach.	

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.13	Workings need to be shown throughout 13. We follow the logic of the worked example provided in the Applicant's Response to Relevant Representations (PDA-008) to generate HRA values for great black-backed gull from the Isles of Scilly SPA. We suggest that the same calculations are provided within the relevant HRA documents, such as within Appendix A.2 of the HRA Stage 1 Screening Report (APP-034). Additional columns should include: Seasonal abundance for displacement assessments; Displacement and mortality rates used; Collision estimates; SPA apportioning values; and Age-class apportioning values. The Applicant may wish to provide separate tables for their preferred approach and for SNCB advised approach.	The Applicant welcomes the JNCC's feedback on the worked example for great black-backed gull from the Isles of Scilly SPA provided in the Applicant's Response to Relevant Representations (PDA-008). Please see the Applicant's response to REP1-066.12 for further information.	As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.14	Misrepresented SNCB advice 14. We welcome that the Applicant acknowledges (Applicant's Response to Relevant Representations (PDA-008)) that species group avoidance rates presented in Ozsanlav-Harris et al. (2023) are incorrectly referred to as "JNCC avoidance rates" within certain documents, specifically Volume 2, Chapter 5: Offshore ornithology (APP-057) and Volume 6, Annex 5.5: Offshore ornithology apportioning technical report (APP-095).	The Applicant notes that these matters were raised in the JNCC's Relevant Representation (RR-033) and responses were provided in the Applicant's Response to Relevant Representations (PDA-008) (see row RR-033.9) submitted at the Procedural Deadline. The Applicant can confirm that these points were included in the Errata Sheet (REP1-044) submitted at Deadline 1. These discrepancies have also been corrected in the updated Volume 2, Chapter 5: Offshore ornithology (F2.5 F02), HRA Stage 1 Screening Report (E1.4 F02), and the HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites	We thank the Applicant for the amendments.
REP1-066.15	15. Similarly, the Applicant acknowledges (Applicant's Response to Relevant Representations (PDA-008)) that JNCC advice regarding foraging ranges, particularly those of Atlantic puffin, common guillemot, and razorbill, has been misinterpreted, but the correct values have been applied and/or there is no impact on the assessment nor on the conclusions drawn.	Assessments (E1.3 F02) submitted at Deadline 2. The Applicant refers the JNCC to the Schedule of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) submitted at Deadline 2 for further information.	(this comment provides JNCC's response to the Applicant's responses set out at REP1-066.15 and REP1-066.16 of Table 2.1). We thank the Applicant for the amendments.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.16	16. Although these corrections may seem semantic as there is neither a material impact on the assessment presented nor on the conclusions drawn, JNCC's view is that the texts not only significantly misrepresent JNCC advice, but puts these misrepresentations into the public domain as the JNCC position. This could then be relied upon erroneously by future projects. We therefore strongly advise that the errors should be corrected by submitting full updated and revised versions of the affected chapters (see also paragraphs 6 to 8 above).		
REP1-066.17	Deviating from previously agreed approaches 17. JNCC remain concerned that previously agreed approaches (during EWG meetings) have not been implemented in the presented assessments.	The Applicant notes the JNCC's comment and has responded to specific points below.	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.18	18. It had been agreed that: • Collision impacts using the SNCB-recommended input parameters would be taken through all stages of the assessment, in addition to those using the Applicant's preferred input parameters (APP-042, D.8.1, item no. 4). However, it isn't clear whether the collision estimates using the Applicant's preferred input parameters have solely been taken through the impact assessment, or whether the SNCB approach has been taken through. We require clarification on this point.	The Applicant can confirm that the species parameters (e.g. body length, flight speed, etc.) that have been used in the assessments were provided by Natural England following the second Expert Working Group meeting (see section D.3.13 of Technical Engagement Plan Appendices Part 1 (A to E) (APP-042) for further information)) and that there has been no deviation from these. For avoidance rates that required updating following the publication of the Ozsanlav-Harris et al. (2023) review, the Applicant has presented and considered both species-group and species-specific avoidance rates (where available - see table 1.4 of Volume 6, Annex 5.3: Offshore Ornithology Collision Risk Modelling Technical Report (F6.5.3 F02)). Assessments using both the species-group and species-specific avoidance rates have been presented in Volume 2, Chapter 5: Offshore Ornithology (APP-057) and HRA Stage 2 ISAA for SPAs and Ramsar sites Assessments (APP-033).	We thank the Applicant for the clarification.
REP1-066.19	• Age classes would be determined from Digital Aerial Survey (DAS), otherwise all adult-type birds would be assumed to be adults (APP-042, D.8.1, item no. 5). As it stands, age class apportioning based on DAS has only been undertaken for Northern gannet, herring gull, great black-backed gull, and lesser black-backed gull in the breeding season. However, for black-legged kittiwake, Northern gannet,	The Applicant notes JNCC's comment and believes that the JNCC has misinterpreted table 1.6 of Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (APP-095). The Applicant confirms that age classes from site-specific survey data (rather than theoretical generalised stable age structure) have been used during the breeding and non-breeding season within the assessments but recognises that the information provided in the application with respect to this is unclear.	We do not consider that we mis-interpreted Table 1.6 of Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (APP-095). In its original form, this document states: *1.3.3.8 In the non-breeding season, age-class was based on Furness (2015) (Table 1.6)* And the worked example of great black-backed gull provided in the Applicant's response to our Relevant

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	herring gull, great black-backed gull, and lesser black-backed gull in the nonbreeding season, and common guillemot, razorbill, and Manx shearwater in the breeding and non-breeding seasons, age class apportioning has been undertaken using stable age structures from Furness (2015). In addition, black-legged kittiwake age class apportioning in the breeding season has been carried out using a combination of DAS age classes and age-specific survival rates.	Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) has been resubmitted at Deadline 2 with the following updates: • Amendments to the presentation of the apportioning method used during the non-breeding season. • Amendments so that the Applicant's approach to age-class apportioning (which aligns with SNCB guidance and advice) is more clearly presented; and • Corrections to Table 1.4 to present the age-class apportioning percentages during the breeding and non-breeding season, which were applied in the HRA Stage 1 Screening Report (E1.4 F02). For species where age-class was not able to be confirmed during the digital area surveys, it is presumed that 100% of the birds were assumed to be adults during the breeding and non-breeding season within the assessment. Specifically for Manx shearwater, common guillemot and razorbill which cannot be aged accurately, this is in line with SNCB advice during the EWG03 (Technical Engagement Plan Appendices - Part 1 (A to E) (APP-042)). The Applicant refers NRW to the Schedule of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) for further information on specific changes made to Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) submitted at Deadline 2	Representations (RR-033.36, PDA-008) continued to reference Furness 2015 as the source for non-breeding season age-class structure. However, we thank the Applicant for confirmation that the assessment derives age class structure from DAS data where this is available, and all individuals are classed as adults where this site-specific data is not available.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.20	Measures to mitigate and avoid displacement by vessels of red-throated diver and common scoter in the Liverpool Bay/Bae Lerpwl SPA 19. Table 1.1 of APP-203 appears to suggest that JNCC have deferred to NRW following EWG06, on the topic of vessel movements at the landfall to install the export cable which would not be subject to seasonal restrictions. However, JNCC does not have the same recollection of this position, and the minutes of EWG 06 also do not match this position. The landfall is within the Liverpool Bay/Bae Lerpwl SPA, for which JNCC has joint responsibility with NRW and NE. Our position in the agreement log (APP-042, D.9, item 22) is "No justification is given for the need to do this during winter. It is also not clear what "vessel movements" actually means. For instance, how many and long [sic] will these vessels be in the SPA? More information is required before JNCC can fully agree to this approach.". The trenchless works on the intertidal zone including up to eight vessel movements at the landfall over the winter period ((APP-033) sections	The Applicant notes the JNCC's comment regarding the representation of JNCC's position in Table 1.1 of Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels (APP-203) and agrees that this text does not accurately represent the minutes of the sixth expert working group which makes no reference to the JNCC deferring to NRW on the topic of vessel movements associated with the installation of the offshore export cable at the landfall. This correction has been included in the Errata Sheet submitted at Deadline 2 (S_PD_1 F03). The JNCC requests justification for why the timing restriction on offshore export cable installation activities within the Liverpool Bay/Bae Lerpwl Special Protection Area (SPA) will not apply to vessel movements at the landfall. The Applicant has provided this information in row RR-011.24 in the Applicant's Response to Relevant Representations (PDA-008). At this stage, no decision has been made regarding which port or ports will be used for the construction of the Mona Offshore Wind Project, and therefore, it is currently unknown where vessels will be transiting to and from. However, as outlined in paragraph 1.3.1.2 of Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels (APP-203), key vessels travelling to the Mona Offshore Cable Corridor and Array Area within and outside Liverpool Bay/Bae Lerpwl SPA will use regular vessel transit routes, as detailed in the Outline Vessel Traffic Management Plan (APP-200) which follow, where possible, established shipping routes within Liverpool Bay and, or	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	1.6.3.48 and 1.6.3.63), which is an exception to the seasonal restriction on cable installation works (see seasonal restriction details in APP-203, section 1.3.1.1). Any disturbance impact to features of the SPA will be temporary for the time of the vessel presence, therefore JNCC do not expect this temporary activity to result in an AEOSI. It is not clear where will vessels transit to and from during these works? Clarification is required before JNCC can fully agree to this approach. JNCC raised these queries in response in the agreement log (APP-042, D.9, item 22), but we have yet to receive a direct response	chartered approaches to ports and harbours. This measure will restrict and minimise the spatial distribution of any disturbance to rafting birds. The Applicant welcomes the JNCC's view that disturbance to features of the SPA from vessel movements at the landfall over the winter period will be temporary and not expected to result in an adverse effect on integrity.	
REP1-066.21	20. We welcome suggestions to minimise impacts to marine mammals and rafting birds. However, as it currently stands it is unclear what measures relate to which activity or receptor, and when the measures are or are not applied. For example: • Table 1.2 (AAP-203) describes vessel activities and whether such measures will apply. It is unclear why measures would apply to	The Applicant notes the JNCC's comment requesting further clarity on which measures outlined in Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels (APP-203) are applicable to which vessel activity. With respect to vessels installing export cables inside the Liverpool Bay/Bae Lerpwl SPA, the principal measure to minimise disturbance to rafting birds and, specifically, common scoter and red-throated diver features of the SPA during the overwintering period is the commitment to no	As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised documents in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	vessels travelling to the Mona Offshore Cable Corridor and Array Area within and outside Liverpool Bay/Bae Lerpwl SPA, yet "Vessels installing export cables outside the Liverpool Bay/Bae Lerpwl SPA" and "Vessels involved in intertidal trenchless installation within Liverpool Bay/Bae Lerpwl SPA" are excluded from mitigation. • Related to this, no detail is given in this table as to which activities the measures fully apply to and which in part apply to, and where measures only apply in part, which measures would not be applied to which activities. No detail is provided on where cable installation vessels will travel from in order to reach the export cable corridor outside of the Liverpool Bay/Bae Lerpwl SPA. It is therefore possible that these vessels will transit across the SPA. Clarification should be provided as to why this activity is excluded from the proposed measures. It also isn't entirely clear what is actually being referred to as "measures" throughout the document. There are "Proposed measures applicable to marine wildlife" and	offshore export cable laying between 1 November and 31 March within the Liverpool Bay SPA. Outside of this period (i.e. between 1 April and 31 October), vessels installing export cables inside the Liverpool Bay/Bae Lerpwl SPA will be expected to comply with the key principles of the Wildlife Safe (WiSe) Scheme (noting the relevant exceptions outlined in paragraph 1.4.1.1 of Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels (APP-203)). All vessels travelling to and from the Mona Offshore Cable Corridor and Array Area within and outside Liverpool Bay/Bae Lerpwl SPA during the construction and operational and maintenance phases) will also be expected to comply with the key principles of the WiSe Scheme where possible (noting the relevant exceptions outlined in paragraph 1.4.1.1 of Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels (APP-203)). In addition, the following measures will be discussed with the licencing authority in consultation with JNCC through finalisation of the offshore environmental management plan: • Key vessels travelling to the Mona Offshore Cable Corridor and Array Area within and outside Liverpool Bay/Bae Lerpwl SPA will use regular vessel transit routes, as detailed in the Outline Vessel Traffic Management Plan (APP-200) which follow, where possible, established shipping routes within Liverpool Bay and, or chartered approaches to ports and harbours. This will act to restrict	

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	"Proposed measures specific to rafting birds". When Table 1.2 references the measures which apply, which measures does this mean? Similarly, in section 1.4 exceptions to measures are described. Which measures would not apply under these exceptions?	and minimise the spatial distribution of any disturbance to rafting birds. • Where it is necessary for vessels to go outside of established navigational routes during transit to/from port and working areas, routes will be preselected to avoid locations where birds are known to aggregate in accordance with the key principles of the WiSe Scheme. Vessel operators will be made aware of bird sensitivities in the Liverpool Bay/Bae Lerpwl SPA and visible aggregations of rafting birds will be actively avoided, within the limitations of vessel safety and manoeuvrability. • All vessels associated with the Mona Offshore Wind Project will use an Automatic Identification System (AIS) which broadcasts the location of the vessel and is monitored by the Projects' Marine Co-ordination Centre. The Applicant has committed to the development of and adherence to an offshore environmental management plan. This will include details of Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels (APP-203) as set out within Schedule 14 Condition 18(1)(e)(vi) of the draft development consent order (C1 draft Development Consent Order F04). The Applicant recognises that it would be beneficial to include further detail in Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels (APP-203) to clarify which measures are applicable to which vessel transit activity. As such an updated version of this document will be submitted at Deadline 3.	

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Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.22	• Some statements within document APP-203 appear to be contradictory. For the Liverpool Bay/Bae Lerpwl SPA will not take place during 1st November to 31st March (section 1.3.1.1). It is also stated that where it is necessary for cable laying vessels to go outside of established navigational routes during transit to/from port and working areas, routes will be pre-selected to avoid locations where birds are known to aggregate (section 1.3.1.2). However, it is then suggested that there is an exception to the measures proposed, whereby the measures don't apply to vessels actively laying cable in areas that coincide with known areas of bird aggregations (1.4.1.1). These statements appear to directly contradict one another. Furthermore, we question why there would be a need for an exception, such that the measures don't apply to vessels actively lay cables in areas that coincide with known areas of bird aggregations. Neither document APP-203 or APP-200 (Outline vessel traffic management plan) describe the ports	Please see the Applicant's response to REP1-066.21.	As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised documents in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	and shipping routes to be used to transit to and from the array and cable corridor. Therefore, it is not entirely clear how a view as been formed that a seasonal restriction would only be required for export installation vessels within Liverpool Bay/Bae Lerpwl SPA. There is no evidence that vessels would not need to go outside of existing shipping routes in order to access the array or cable corridor during the winter.example there appears to be a measure whereby cable installation activities in		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.23	21. In addition, as currently drafted, the DCO neither specifies the period during which relevant measures are required (November to March inclusive for red-throated diver and common scoter), nor does it require the agreement of the JNCC, which has joint responsibility for the Liverpool Bay/Bae Lerpwl SPA. We therefore request the DCO be amended as per our additions in italics to read: 18.— (1) No part of the authorised scheme may commence until the following (insofar as relevant to that activity or phase of activity) have been submitted to and approved in writing by NRW-Licensing, in consultation with the relevant statutory nature conservation bodies (NRW Advisory and JNCC), Trinity House and the MCA as appropriate— (e) an offshore environmental management plan covering the period of construction and operation to include details of— (vi) measures to minimise disturbance from transiting vessels to marine mammals, and rafting birds;	The Offshore Environmental Management Plan (EMP) will be finalised in accordance with the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (APP-203). The Applicant's commitment to a seasonal restriction for the offshore export cable installation works during the period 1 November to 31 March within the Liverpool Bay Special Protection Area (SPA) is included in the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels and is only relevant to the transmission marine licence which is outside the scope of the DCO dML, As set out in the Marine Licence Principles document (J9 F03) this commitment is also expected to be secured within the standalone NRW marine licence.	We thank the Applicant for their comments. We understand that there is a degree of separation between the activities consented by the deemed Marine Licence and the NRW marine licence (i.e. export cable installation licenced under the latter only), and that therefore wording on seasonal restrictions with regard to export cable installation through the Liverpool Bay/Bae Lerpwl SPA is only relevant to the NRW ML. However, our comments were on the wording of the DCO rather than the dML. As the DCO consents all activities and works relevant to the project, we maintain that as the controlling consent for the project, it should ensure that required mitigation measures are secured by specifying what the requirement is. We support that the details and logistics of how these would be implemented is detailed in Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (APP-203) and the Offshore Environmental Management Plan (EMP). Noting the Examining Authority's written Question Q1.10.12 to the Applicant (PD-013), we are also of the opinion that if an outline Offshore Environmental Management Plan (EMP) is submitted into the examination, as suggested by the ExA, which includes the same seasonal restriction, JNCC and the Secretary of State can be more confident that the measure would be secured, and that this potential adverse effect on the integrity of the SPA would be avoided.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	(vii) works associated with the installation and/or protection of the cables will not be carried out within the Liverpool Bay/Bae Lerpwl SPA during the most sensitive time period of 1st November to the 31st March inclusive; and measures to minimise the potential spread of invasive non-native species; (viii) measures to minimise the potential spread of invasive non-native species;		To further guarantee this mitigation, if an outline EMP is submitted to the Examination, we suggest a revision to the wording of the DCO is made to reflect that a finalised Offshore EMP would need to be agreed by the Licencing Authorities, in consultation with the SNCBs. JNCC requests that, even if the outline EMP is submitted containing the requested restriction, the revised wording of the DCO still explicitly retains a requirement for the finalised EMP to also include this restriction – revised wording is suggested as follows: 18.— (1) No part of the authorised scheme may commence until the following (insofar as relevant to that activity or phase of activity) have been submitted to and approved in writing by NRW-Licensing, in consultation with the relevant statutory nature conservation bodies (NRW Advisory and JNCC), Trinity House and the MCA as appropriate— (e) a final offshore environmental management plan, derived from the submitted outline offshore environmental management plan, covering the period of construction and operation to include — (vi) details of measures to minimise disturbance from transiting vessels to marine mammals, and rafting birds; (vii) a restriction that works associated with the installation and/or protection of the cables will
REP1-066.24	22. These advised amendments are in alignment with the DCOs for the approved East Anglia One North and East Anglia Two Offshore Wind Farms, and the proposed DCO for the refused Thanet Offshore Wind Farm Extension project.		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
			not be carried out within the Liverpool Bay/Bae Lerpwl SPA during the most sensitive time period of 1st November to the 31st March inclusive; (viii) measures to minimise the potential spread of invasive non-native species; There is also apparent discrepancy in the timings required of the NRW Marine Licence and the DCO deemed Marine Licence. Marine Licence Principles Document Table 1, page 19 (APP-195) states that the NRW Marine Licence would require the Applicant to submit a Project Environmental Management Plan (PEMP) to NRW at least 6 weeks prior to commencement of the Licenced Activities, but states '*dML condition 18((1)(e) requires submission of an offshore environmental management plan 4 months prior to commencement of the authorised scheme'*. This could leave a situation where a OEMP is agreed by MMO, but NRW do not agree with a proposed PEMP. We therefore suggest that the timescales for submission of these documents are aligned, and ideally achieved in consultation with both Licencing Authorities together. We are not aware that a draft NRW Marine Licence or a draft DCO dML has been submitted to Examination. Could the applicant confirm this.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
			The Applicant should provide clarity on the specifics of when a seasonal restriction within the Liverpool Bay/Bae Lerpwl SPA would apply. There is currently ambiguity between the Marine Licence Principles Document (APP-195) and the Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels (APP-203). The former refers to 'works', while the latter refers to cable installation activities. This latter potentially allows for other activities set out in the definition of 'commence' in Part 1 of the DCO (pre-construction surveys and monitoring, and unexploded ordnance surveys and clearance of unexploded ordnance) to occur within the sensitive period for the SPA.
REP1-066.25	23. In our Relevant Representations (RR-033), JNCC made the recommendation for seasonal restrictions on offshore cable laying to apply to a 2km and 2.5km buffer (for red-throated diver and common scoter, respectively) around the Liverpool Bay/Bae Lerpwl SPA. Having reviewed the response by the Applicant to those comments (PDA-008, RR-033.12), we are of the view that this would not be required for a conclusion of no Adverse Effect on Integrity to be reached.	The Applicant welcomes the JNCCs response and confirmation that this matter is resolved.	This is noted.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.26	Cumulative and in-combination assessments 24. JNCC raised concerns over the approach to both the Cumulative (EIA) and In-combination (HRA) assessments in our Relevant Representations (RR-033). We note the Applicant's response to those concerns (PDA-008, RR-033.18). Whilst no progress has been made at the time of submission of these Written Representations, we wish to make the Examining Authority aware that there are on-going discussions with the Applicant on this matter, and we will provide any updated comments we have in due course.	The Applicant notes the JNCC's comment and welcomes further engagement with JNCC regarding the Applicant's approach to cumulative and in-combination assessments, in particular, gap-filling of historical projects. The Applicant also highlights its Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2, which provides further information regarding this matter.	As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course.
REP1-066.27	Seasonal definitions Volume 2, Chapter 5: Offshore ornithology (APP-057) Table 5.13 and 5.14 25. Seasonal definitions differ across table 5.13 and 5.14, so it is not clear which is being used in each circumstance it is used. As this could influence seasonal impact values, without this being clarified, we cannot agree the results of the EIA and HRA	The Applicant notes the JNCC's comments and highlights that NRW have also raised the matter of seasonal definitions within their Written Representation (REP1-056). The Applicant acknowledges that the approach described by the JNCC (in REP1-066.30 to REP1-066.34) and NRW (in REP1-056.44) should have been undertaken for the assessment of collision impacts presented in the application. For collision impacts (including for northern gannet, black-legged kittiwake, Manx Shearwater, great black-backed gull and lesser black-backed gull, which are the examples given by the JNCC), Volume 2, Chapter 5: Offshore ornithology	(this comment provides JNCC's response to the Applicant's responses set out at REP1-066.27 to REP1-066.35 of Table 2.1). We thank the Applicant for the clarifications.

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Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	rule out there being an adverse effect beyond reasonable scientific doubt.	(F_2_5 F02), Volume 2, Annex 5.6: Offshore Ornithology Population Viability Analysis Technical Report (F_6_5.6 F02), HRA Stage 1 Screening Report (E_1.4 F02) and the HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02) have been updated to include the corrected seasonal definition and abundances and submitted at Deadline 2. Table 1.14 of Volume 2, Chapter 5: Offshore ornithology (F_2_5 F02) continues to present the bio seasons quoted Furness (2015), but Table 1.15 of Volume 2, Chapter 5: Offshore ornithology (F_2.5 F02) has been corrected to clarify which months are included within each of the bio seasons taken through to assessment. The Applicant can confirm that all the species assessed have been carried out using the full breeding season, as presented in Furness (2015) and recommended by the JNCC.	
REP1-066.28	Volume 2, Chapter 5: Offshore ornithology (APP-057) Tables 5.38, 5.39, 5.42, and 5.44 26. For some species it would appear, though it is unclear, that impacts for a particular month which is within two BDMPS seasons have been split between the two seasons. Clarity is required if this is the case, and when this has been undertaken, and whether this is an appropriate use of the survey data, for instance when within a month the survey was carried out. For example, if data was calculated at one end of a month, is it appropriate to halve this value and associate one half with the other end of the month? Without this being clarified, we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.29	27. If it is the case that impacts for a particular month which is within two seasons have been split between the two seasons, it is unclear whether this approach is appropriate when put into context of seasonal reference populations (e.g. Furness (2015)). Do the seasonal reference populations used also split populations in the one month between seasons? Without this being clarified, we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.		
REP1-066.30	28. Furness (2015) defines the full breeding season for Northern gannet as March-September. Therefore, we advise this definition is used, and then adjust the nonbreeding season definitions in Furness (2015) accordingly to ensure no months are considered in two seasons. This would make the post-breeding season October to November, and the pre-breeding season December to February.		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.31	29. Furness (2015) defines the full breeding season for black-legged kittiwake as March-August. Therefore, we advise this definition is used, and then adjust the non-breeding season definitions in Furness (2015) accordingly to ensure no months are considered in two seasons. This would make the post-breeding season September to December, and the pre-breeding season January to February.		
REP1-066.32	30. Furness (2015) defines the full breeding season for Manx shearwater as April to August. Therefore, we advise this definition is used, and then adjust the non-breeding season definitions in Furness (2015) accordingly to ensure no months are considered in two seasons This would make the post-breeding season September to October, and the pre-breeding season March. Therefore, the post-breeding mean seasonal peak should be calculated as the mean from year 1 (25 individuals) and year 2 (1 individual), giving a mean of 13 individuals, not 182 individuals as stated in the Applicant's response to RR-33.10 (PDA-008). A seasonal		

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Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	mean of 182 individuals appears to have been calculated assuming the post-breeding season is August to October (which is incorrect), as opposed to September to October.		
REP1-066.33	31. Furness (2015) defines the full breeding season for great black-backed gull as late March-August. Therefore, we advise this definition is used, and then adjust the nonbreeding season definitions in Furness (2015) accordingly to ensure no months are considered in two seasons. This would make the non-breeding season September to February.		
REP1-066.34	32. Furness (2015) defines the full breeding season for lesser black-backed gull as April-August. Therefore, we advise this definition is used, and then adjust the non-breeding season definitions in Furness (2015) accordingly to ensure no months are considered in two seasons. This would make the post-breeding season September to October, the winter season November to February, and pre-breeding season as March.		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.35	33. We advise that full breeding seasons are used, and therefore monthly density estimates are not split for input into the Collision Risk Modelling (CRM). This is also due to the dates when the digital aerial surveys were carried out. The majority of surveys were carried out during the beginning of the month; therefore it is debatable whether it is appropriate to assume that the abundance is sufficiently representative to assign half the value to the latter half of the month.		
REP1-066.36	Foraging ranges HRA Stage 1 Screening Report (APP-034) Table 1.2 and 1.7 34. We disagree with the application of foraging ranges for Atlantic puffin. Although breeding season apportioning has not been carried out, our view is that it should be when using the correct Mean Season Peak value (see paragraph 36 on the issue of incorrect Mean Season Peak calculation), therefore it is important to use the correct foraging range. It is not accurate to state, in Tables 1.2	The Applicant notes the JNCC's comment and that this matter was raised in JNCC's Relevant Representation (RR-033). Please see row RR-033.31 of the Applicant's Response to Relevant Representations (PDA-008) for further information. The Applicant can confirm that the foraging range for Atlantic puffin has been updated in the HRA Stage 1 Screening Report (E_1.4 F02) submitted at Deadline 2.	We thank the Applicant for the clarification. See also our response to REP1-066.10 set out in this table.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	and 1.7 of the HRA Stage 1 Screening Report (APP-034), that "JNCC requested (via their S42 response) that all SPAs to the north of the Mona Offshore Wind Project within 265.4km be considered for Atlantic puffin.". In JNCC correspondence to the Applicant on 28 June 2023 (APP-042, D.6.2), we advised "We confirm that the foraging range to use for Atlantic puffin is 265.4km (MM+SD). Woodward et al. (2019) state (page 138) that "As was the case for common guillemot and razorbill, foraging distances travelled by Atlantic puffin from Fair Isle are higher than those at most other sites (RSPB dataset), although they are not as exceptional when compared to other sites as those of the other two auk species" and "Observations of birds carrying fish have been made at distances of 250km from the Faeroe Islands (Harris & Wanless 2011), offering further speculative evidence that Atlantic puffins forage at longer distances than the other auk species. Hence the distances observed from Fair Isle and Hermaness should not necessarily be considered exceptional		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	until more data and data from additional colonies have been collected, particularly data from colonies where local prey availability may be greater". Therefore, we advise using the generic mean max +1SD value as stated in Table 5.". Therefore, we advise that the foraging range within Table 5 of Woodward et al. (2019) (137.1 ± 128.3 = 265.4km) should be applied to all SPAs. There is no exception to this value for Atlantic puffin. This value should be used throughout. Without this error and other errors being fixed, we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.		
REP1-066.37	HRA Stage 1 Screening Report (APP-034) Table 1.2 and 1.7 35. We disagree with the application of foraging ranges for common guillemot and razorbill. It is not accurate to say, in Tables 1.2 and 1.7 of the HRA Stage 1 Screening Report (APP-034), that "JNCC requested via their S42 response all SPAs to the north of the Mona Offshore Wind Project within	The Applicant notes the JNCC's comment and that this matter was raised in JNCC's Relevant Representation (RR-033). Please see row RR-033.32 of the Applicant's Response to Relevant Representations (PDA-008) for further information. The Applicant can confirm that the foraging ranges for common guillemot and razorbill have been updated in the HRA Stage 1 Screening Report (E1.4 F02) submitted at Deadline 2.	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	153.7km be considered for common guillemot" and "JNCC requested via their S42 response all SPAs to the north of the Mona Offshore Wind Project within 164.6km be considered for razorbill". We do recommend that these values are applied in certain circumstances. However, these circumstances are not "all SPAs north of Mona", the circumstances are for all Northern Isle SPAs. Therefore, it is unclear whether the correct SPAs and other sites have been screened in with regard to Atlantic puffin, common guillemot, and razorbill. It is therefore also unclear whether the calculations in Volume 6, Annex 5.5: Offshore Ornithology apportioning technical report (APP095) are correct, and subsequently, whether any of the values relevant to these species and SPAs in the HRA are accurate.		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.38	Displacement assessments Volume 2, Chapter 5: Offshore ornithology (APP-057) Table 5.25 36. The incorrect Mean Seasonal Peak abundance for inputting into the displacement matrix appears to have been calculated for Atlantic puffin in the non-breeding season. Comparing Volume 6, Annex 5.1: Offshore Ornithology Baseline Characterisation Technical Report (APP-091) Table 1.38, Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical Report (APP-092) section 1.4.3, and Volume 2, Chapter 5: Offshore ornithology (APP-057) Table 5.13 and 5.14, suggests that the Mean Seasonal Peak should be 22 for Atlantic puffin during the non-breeding season, not 0 as is stated in APP-057 Table 5.25. Therefore, the predicted displacement mortalities during both the non-breeding season and annually may be incorrect. This may then have implications for the subsequent assessment, such as the need for	The Applicant notes the JNCC's comment and that this matter was raised in JNCC's Relevant Representation (RR-033). Please see row RR-033.13 of the Applicant's Response to Relevant Representations (PDA-008) for further information. The seasonal abundance for Atlantic puffin has been corrected in Volume 2, Chapter 5: Offshore ornithology (F2.5 F02) and Volume 2, Annex 5.2: Offshore Ornithology Displacement Technical Report (F6.5.2 F02) submitted at Deadline 2. The predicted impact on Atlantic puffin from displacement was also updated within HRA Stage 1 Screening (E1.4 F02). However, no sites were taken through to HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02). Please refer to the Applicant's response to REP1-066.12 for consideration of other species. The Applicant can confirm that the amendments made to the documents outlined above do not alter the conclusions presented.	We thank the Applicant for the clarification. See also our response to REP1-066.10 set out in this table.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	apportioning of impacts. Therefore, multiple SPAs may not have been correctly treated at the LSE screening stage, and SPAs may not have been taken through to the Appropriate Assessment. We recommend a thorough review of the Mean Seasonal Peak calculation and the need for any subsequent assessment. It is necessary to carry out this review in order to carry out a robust HRA. This review should also apply to other species assessed for displacement impacts.		
REP1-066.39	Volume 2, Chapter 5: Offshore ornithology (APP-057) section 5.7.2.11 to 5.7.2.27 and HRA Stage 1 Screening Report (APP-034) section 1.4.6.17 37. We do not agree that single values of displacement and mortality should be used for analysis of population impacts, as the Applicant has suggested in APP-057 section 5.7.2.11	The Applicant acknowledges the JNCC's comments. As outlined in the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2, the Applicant intends to provide additional information in accordance with the advice provided by NRW and the JNCC within their Relevant Representations (RR-011 and RR-033, respectively) and Written Representations (REP1-056 and REP1-066/REP1-067, respectively) for examination at Deadline 3. This will include presentation of displacement impacts apportioned to designated sites for the full range of	(this comment provides JNCC's response to the Applicant's response set out at REP1-066.39, which also covers REP1-066.40 – REP1-066.41). As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077).

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	to 5.7.2.27. As advised in the Joint SNCB Interim Displacement Advice Note, we advise that a range of displacement mortality values are taken through to the assessment of population impacts (SNCBs, 2022). We specifically advise that single figures are not used. Whilst we would not base our advice solely on the worst-case likely scenario, it is important to look at the range of likely scenarios in order to determine whether there is a realistic possibility of impact that would need further consideration (i.e. through a Population Viability Analysis).	displacement and mortality rates recommended by the SNCBs (including those outlined here in REP1-066.40 to REP1-066.41) to aid the SNCB's interpretation of the apportioned impacts on individual SPAs.	We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course. As per our advice given to the Applicant at the Mona Offshore Wind Project & JNCC Monthly Meeting on 4th Sept 2024, whilst we agree that apportioned impacts within the HRA using a range-based approach to displacement needs to be presented, it also needs to be used in subsequent stages of the assessment, and used within both the EIA and HRA. The range-based displacement approach needs to be used: • To determine LSE and whether features are screened into the Appropriate Assessment • To determine whether cumulative and/or in-combination assessments are required • In the cumulative and in-combination assessments To compare to baseline mortality to determine whether a PVA is required

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.40	38. For most species, the evidence suggests that there is a range of displacement rates occurring at operational wind farms, including the upper end of the SNCB-advised range, and sometimes beyond. For example, with regard to the evidence of displacement rates and distance, Peschko et al. (2023) observed a reduction of 91% of common guillemot within offshore wind farms plus a 1km buffer, and 76% within offshore wind farms plus a 10km buffer, in autumn. In winter, they found a reduction of 67% within offshore wind farms plus a 1km buffer, and 50% within offshore wind farms plus a 10km buffer. Guillemot density in autumn was significantly affected up to a mean distance of 19.5km (range 18–21km) with a reduction of 79% within this area. Guillemot density in winter was significantly affected up to a mean distance of 16.5km (range 15–18km) with a reduction of 51% within this area. In addition, Pesckho et al. (2020a) found a reduction in guillemot densities during the breeding season inside offshore wind farms of 63% (75% when the blades were turning).		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	Further, a study by Pesckho et al. (2020b) found a 63% reduction in guillemot density in the wind farm plus a 3km buffer, and a 49% reduction in the wind farm plus a 9km buffer during spring. A 44% reduction was found in the wind farm plus a 3km buffer during the breeding season. Therefore, we regard a 70% displacement rate to be within a potential range of displacement. This variation in displacement rates is why we advise that a range of potential impacts are considered.		
REP1-066.41	39. There is currently no empirical evidence of mortality rates of displaced birds, however the individual-based model SeabORD has been used to investigate the potential ranges of mortality for select species and SPAs. This suggested that mortality rates could occur within the 1-10% range		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	advised by SNBCs, but could also be higher, e.g. up to 14.5% for razorbill (Searle et al., 2020). Therefore, we regard a 10% mortality rate to be within a potential range of mortality. This variation in mortality rates is why we advise that a range of potential impacts are considered.		
REP1-066.42	40. Where the 1% threshold of baseline mortality is surpassed, we recommend further investigation is carried out via a PVA (for both the scenario of displacement and mortality rates exceeding 1% baseline mortality, and the worst-case scenario of displacement and mortality rates). A single value of mortality from displacement doesn't give a full picture of the range of potential impacts, and indicates false precision in this estimate. Therefore, we do not recommend that single estimates of displacement are relied upon when making decisions.	The Applicant notes the JNCC's comment. Please see the Applicant's response to rows REP1-066.39 to REP1-066.41 above.	(this comment provides JNCC's response to the Applicant's response set out at REP1-066.43 of Table 2.1). We thank the Applicant for their response, but this does not address our comments. Please see our comments to responses to REP1-066.39 – REP-066.41 above on the use as well as the presentation of the full range of impacts.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.43	41. For the EIA, we have confidence that annual impacts against the largest BSMPS population do not exceed 1% baseline mortality, and further investigation (e.g. through PVA) would not be required in this case, at the worst-case scenario of displacement and mortality rates for each species.	The Applicant welcomes the JNCC's agreement that for all species examined in the environmental impact assessment, the worst-case scenario of displacement and mortality rates would not increase the baseline mortality by more than 1%.	
REP1-066.44	42. However, given the issues on assigning age classes to individuals highlighted below (paragraph 48 to 51) we do not have the same confidence for HRA. The Applicant has not provided SPA-apportioned displacement matrices within the documentation. The displacement and mortality rates used can make a large difference to the magnitude of impact (see comparative examples of displacement mortalities for black-legged kittiwake in table 1 and 2 above). It is therefore difficult to know whether any combination of displacement and mortality rates would result in impacts greater than 1% baseline mortality for any feature of any SPA. Therefore, it is unclear whether an SPA feature should have been taken through to PVA. On the	The Applicant has confirmed in response to row REP1-066.19 that the age-class apportioning undertaken for the HRA used the method advised by the JNCC and acknowledges that this was not clearly presented in the application materials. Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Note (F6.5.5 F02) has been updated at Deadline 2 to provide further detail of the Applicant's methodology. As outlined in the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2, the Applicant intends to provide additional information in accordance with the advice provided by NRW and the JNCC within their Relevant Representations (RR-011 and RR-033, respectively) and Written Representations (REP1-056 and REP1-066/REP1-067, respectively) for examination at Deadline 3. This will present the range of displacement and mortality rates requested by the JNCC. Please note the Applicant's response to REP1-056.88, which welcomes NRW's advice that "NRW (A) are not advising that the HRA be based solely on the upper end of the %	(this comment provides JNCC's response to the Applicant's responses set out at REP1-066.44 and REP1-066.45 of Table 2.1). We thank the Applicant for their response, but note our comments on use of the full range of displacement and mortality in determining the need for PVA in REP1-066.39 above. As NRW, JNCC also does not base our advice solely on the upper confidence limits. However, given the evidence for variability in both displacement and mortality rates described in REP1-066.40 and REP1-066.41, it is important to consider the implications for populations were impacts at these upper rates to occur and their likelihood. Only considering population impacts at a single rate does not allow such consideration and reduces the confidence in the conclusions of the assessment.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	basis of this, we do not currently consider that a sound conclusion of no AEOSI can be made.	displacement and % mortality rates advised (e.g. 70% displacement and 10% mortality for auks)".	
REP1-066.45	We strongly advise that the application documents are updated with this information.		

REP1-066.46	Collision risk modelling Volume 2, Chapter 5: Offshore ornithology (APP-057) Tables 5.38, 5.39, 5.40, 5.41, 5.42, 5.43, 5.44, 5.45, and 5.48, and sections 5.7.5.65, 5.7.6.4 and 5.7.6.7. Volume 6, Annex 5.5: Offshore ornithology apportioning technical report (APP-095) Table A.1 44. We disagree with the use of the term 'JNCC avoidance rates', or similar, to describe the Ozsanlav-Harris report. Although Ozsanlav-Harris et al. (2023) is a JNCC report, it does not in itself constitute our recommended avoidance rates. Referring to it as 'JNCC avoidance rates' incorrectly gives the message that JNCC advise use of every number in the report as it appears, which is not necessarily the case. Our advice on implementation of the results of Ozsanlav-Harris et al. (2023) is included in the joint SNCB guidance note on Collision Risk Modelling (CRM). This uses the rates from Ozsanlav-Harris et al. (2023), but species grouping is an important aspect of this. This information is	Please see row RR-033.9 of the Applicant's Response to Relevant Representations (PDA-008). Reference to the term "JNCC Avoidance Rates" has been removed from the following documents submitted at Deadline 2: • Volume 2, Chapter 5: Offshore Ornithology (F2.5 F02) • Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02)	We thank the Applicant for the amendments.

	contained within advice which Natural England provided on 7 July 2022 directly to the Applicant and is also used. Those rates should be regarded as and referred to as 'joint SNCB avoidance rates', whilst the Ozsanlav-Harris et al. (2023) should be named as Ozsanlav-Harris et al. (2023) rates. This has been iterated to Mona Offshore Wind during the Expert Working Group (EWG) several times, for example during the Ornithology EWG06 meeting held on 19 October 2023 (APP-042, section D.7.1, agenda item no. 5), and within JNCC comments provided on 23 November 2023 on the minutes of the Ornithology EWG06 meeting (APP-042, section D.7.1, agenda item no. 5).		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.47	45. The applicant's response to JNCC comments on the minutes of the Ornithology EWG06 meeting (APP-042, section D.7.1, agenda item no. 5) state "Applicant response: Thank you – we have updated the reference throughout our documents" yet clearly this is not the case (see tables and sections listed in heading).		
REP1-066.48	46. Although this correction may seem semantic as there is neither a material impact on the assessment presented nor on the conclusions drawn, JNCC's view is that the text not only significantly misrepresents JNCC advice, but puts these misrepresentations into the public domain as the JNCC position. This could then be relied upon erroneously by future projects. We therefore strongly advise that the errors should be corrected by submitting full updated and revised versions of the affected chapters (see also paragraphs 6 to 8 above).		
REP1-066.49	Volume 2, Chapter 5: Offshore ornithology (APP-057) section 5.7.5 47. We disagree with the use and	Please see row RR-033.15 of the Applicant's Response to Relevant Representations (PDA-008), which provides the details of the upper and lower 95% confidence intervals from	We thank the Applicant for the clarification. We note that upper and lower confidence intervals for collision

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	presentation of only mean or central collision estimates throughout. The Confidence Intervals associated with collision estimates should also be provided and taken through the assessment to assess the full range of potential effects. This comment also applies to the HRA Integrity Matrices document (APP-035), Section 1.2.5, and the HRA Stage 1 Screening Report document (APP034). However, we don't consider that this makes a material difference to the outcomes of the impact assessment.	the collision risk model, which are presented within Volume 6, Annex 5.3: Offshore ornithology collision risk modelling technical report (APP-093). However, it is noted that the assessment presented in Volume 2, Chapter 5: Offshore ornithology (APP-057), the HRA Stage 1 Screening Report (APP-034) and the HRA Stage 2 Information to Support an Appropriate Assessment, Part Three: Special Protection Areas and Ramsar Sites Assessments (APP-033) is based on the mean collision estimates only. Additional information for the EIA and HRA based on upper and lower confidence intervals will be provided at Deadline 3. This will include the apportioned impacts to individual SPAs.	mortalities have been provided, but these have not been apportioned to individual relevant SPAs. We are of the view that the mean predicted mortalities from the stochastic Collision Risk Model can be used: • To determine LSE and whether features are screened into the Appropriate Assessment • To determine whether cumulative and/or in-combination assessments are required • In the cumulative and in-combination assessments • To compare to baseline mortality to determine whether a PVA is required However, we expect that the full range of predicted collision mortalities is presented within the EIA and the HRA (apportioned to SPAs) i.e. that the upper and lower 95% confidence intervals are presented alongside the mean. This information would be particularly important in determining Compensation requirement, should AEOSI not be ruled out and a Derogation case required.
REP1-066.50	Assigning age-classes to individuals Offshore ornithology apportioning technical report (APP-095) Table 1.4 48. The last column in Table 1.4 should be titled "Proportion of adult birds (%)" not "Proportion of immature birds (%)".	The Applicant thanks the JNCC for identifying this typing error. This has been amended in an update to Volume 6, Annex 5.5: Offshore Ornithology Apportioning Report (APP-095) submitted at Deadline 2.	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.51	Offshore ornithology apportioning technical report (APP-095) section 1.3.3 49. No information is provided on the number of adults and immatures identified from Digital Aerial Surveys (DAS, for example either within the Volume 6, Annex 5.5: Offshore ornithology apportioning technical report (APP-095) or Volume 6, Annex 5.1: Offshore Ornithology Baseline Characterisation Technical Report (APP-091). Without an understanding of the number of birds identified to age classes, as a proportion of the total number of birds (per species), it is hard to know whether a representative sample was identified, and whether this was appropriate to use when applying a ratio of adults and immatures to unidentified birds.	The Applicant notes the JNCC's comment. This has been amended in an update to Volume 6, Annex 5.5: Offshore Ornithology Apportioning Report (APP-095) submitted at Deadline 2.	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.52	Offshore ornithology apportioning technical report (APP-095) section 1.3.3 50. We disagree with the calculation of black-legged kittiwake age classes. This approach was not raised by the applicant during EWG meetings or subsequently, and therefore JNCC has not agreed to this approach. The Hornsea Offshore Wind Farm Project Two approach to apportioning to age class referred to in section 1.3.3.5 relies on reliable counts of first year birds, i.e. in the case of black-legged kittiwake first summer birds which by August of that year have largely transitioned to adult plumage and therefore indistinguishable from adults. Therefore, the identification rate of first summer blacklegged kittiwake is questionable and calculations derived from this, for example, applying survival rates to define an age class structure is also questionable. It is noticeable that more recent projects such as Hornsea Offshore Wind Farm Project Four and the East Anglia projects have not used this approach. Further, we	The Applicant can confirm that as part of the correction to Volume 6, Annex 5.5: Offshore Ornithology Apportioning Report (APP-095) the age-class apportionment during the breeding season has been amended to 95.23% for black-legged kittiwake.	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	advise that stable age structures are not derived using population viability analysis, and the method outlined in this report is effectively a manual version of this, which we do not recommend. We therefore disagree with the percentage of black-legged kittiwake adults and immatures in the breeding season in Volume 6, Annex 5.5: Offshore ornithology apportioning technical report (APP-095) Table 1.6.		
REP1-066.53	Offshore ornithology apportioning technical report (APP-095) section 1.3.3 51. We disagree with the methods of apportioning impacts between adults and immatures during the non-breeding season (Volume 6, Annex 5.5: Offshore ornithology apportioning technical report (APP095), paragraph 1.3.3.8). We advise that the same approach is taken as for the breeding season, as has been advised previously during EWG meetings and correspondence, by using the proportions of adults and immatures identified by surveys, and otherwise assuming all adulttype birds are	Please refer to the Applicant's response to REP1-066.19.	We thank the Applicant for confirmation that age class structure has been derived from DAS data where this is available, and an assumption that all individuals are adults where age-class cannot be determined.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	adults. Without this approach being agreed, we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.		
REP1-066.54	Apportioning individuals to SPAs Offshore ornithology apportioning technical report (APP-095) section 1.3.5 52. We require clarity regarding the method of apportioning impacts to SPAs during the non-breeding season. We advise that to calculate apportion impacts to colonies in the non-breeding season, this should be based on the proportion of the SPA adult birds, across the BDMPS total of birds of all ages, for each relevant non-breeding BDMPS season, as has been advised previously during EWG meetings and correspondence.	The Applicant can confirm that the apportioning of adult birds during the nonbreeding season has been calculated by dividing the number of adult birds from a colony by the number of adult birds within the BDMPS. This means that the resulting apportioned value presents adult birds only. This then allows the site-specific age-class proportions from the DAS to be used to correct the impact value. The methodology section of Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Note (F6.5.5 F02) has been updated at Deadline 2 to present the Applicant's approach more clearly.	We thank the Applicant for the clarification. However, there appears to be some irregularity in the description of the approach to apportioning impacts to colonies in the non-breeding season. In the Applicant's response to Relevant Reps (RR-033.25, PDA-008) it is stated that the contribution of adult birds from an individual designated site to the relevant BDMPS population for each species/season combination is divided by the total BDMPS population. This read as though it has been calculated by dividing the number of adult birds from a colony by the number of **all birds** within the BDMPS. We agree with the Applicant's approach as we understood it in our comments of responses to Relevant Reps (RR-033.26, REP2-097). Note the Applicant's response to Relevant Reps RR-033.26 was actually answered in RR-033.25. However, here (REP1-066.54, REP2-081) the Applicant states that it has been calculated by dividing the number of adult birds from a colony by the number of **adult** birds within the BDMPS. We reiterate that our on the approach to apportioning impacts to colonies in the non-breeding season is undertaken based on the proportion of the SPA adult

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
			birds across the BDMPS total of birds of **all ages** for each relevant non-breeding BDMPS season using the information in the tables in Appendix A of Furness (2015). However, we note that the Applicant's approach of calculating the proportion of adults at the colony as a proportion of the total adults in the BDMPS does mean that a higher apportionment value for a designated site is calculated, which can be considered precautionary. Given the very small predicted impacts from the Mona project alone, we note that if the standard advised approach to age classes and apportioning to designated sites in the non-breeding season was used instead of the Applicant's approach it would not alter the conclusions regarding levels of significance of impact from the project alone in this instance. However, for other projects with larger predicted impacts, taking the Applicant's potentially overly precautionary approach may result in different conclusions. Therefore, we would not advise the Applicant's approach is followed for other projects and maintain that our preferred approach is to follow the standard approach taken by other projects.
REP1-066.55	Offshore ornithology apportioning technical report (APP-095) Table 1.7 53. It is not clear whether sabbatical birds (individuals which do not breed in a particular year) have been removed from the assessment. There is suggestion that they haven't	Please see row RR-033.27 of the Applicant's Response to Relevant Representations (PDA-008) where the matter of sabbatical birds is addressed. To reiterate, the Applicant can confirm that sabbatical birds have not been removed from any of the assessments presented within the application documents. The Applicant acknowledges that the inclusion of Table 1.7 in Volume 2, Annex 5.5: Offshore Ornithology	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	(Section 1.3.4.5), yet the heading of Table 1.7 suggests that sabbatical rates are considered within the HRA. JNCC advice is that sabbatical birds should not be removed (i.e. that all adult birds are considered to be breeding), and suggest that Table 1.7 is removed to aid clarity. Without this issue being clarified, we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.	Apportioning Technical Report (APP-095) added confusion. Volume 2, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) has been updated to remove Table 1.7.	
REP1-066.56	Offshore ornithology apportioning technical report (APP-095) Table 1.17 54. There are two black-legged kittiwake colonies, "Offshore - Irish Sea" and "Morecambe Central Gas Platform" which are very close to the Mona Array (20.56km and 33.15km, respectively) with very large adult counts (1234 and 1112, respectively). It is not clear what or where these colonies are (and hence whether these are two single or multiple colonies, and whether the given distances from the Mona Array are mean distances of two or more colonies), or where the data on counts has come from. We request clarification as to whether these are	As stated in section 1.3 of Volume 6, Annex 5.5: Offshore ornithology apportioning technical report (APP-095), the data for the two black-legged kittiwake colonies, "Offshore - Irish Sea" and "Morecambe Central Gas Platform" are taken from the Seabird Monitoring Programme database. To confirm, the Offshore - Irish Sea is made up of the Douglas complex, Hamilton North and Hamilton. The "Morecambe Central Gas Platform" is a single site. These platforms were counted in 2022 for "Offshore - Irish Sea" and 2020 for "Morecambe Central Gas Platform". The distance of 20.56 km is the average distance between the Mona Array Area and each of the three platforms (Douglas complex, Hamilton North and Hamilton).	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	offshore colonies on oil and gas platforms, the origin of the data, and the confidence that can be placed on it (i.e. whether standard survey methodologies were used. Given that these colonies have some of the largest proportional SPA weight values, much of the impacts are apportioned to these colonies, with consequently reduced impacts apportioned to SPAs. Therefore, it is important to have reliable data to use in the apportioning value calculations. We strongly recommend that these clarifications are provided, to give confidence in the data and resultant conclusions for the HRA.		
REP1-066.57	Reference populations Volume 2, Chapter 5: Offshore ornithology (APP-057) sections 5.3.9.10 to 5.3.9.12 55. We maintain our disagreement over the breeding season BDMPS reference population used for the alone assessment (Volume 2, Chapter 5: Offshore ornithology (APP-057)), as has previously been advised.	Please see row RR-033.11 in the Applicant's Response to Relevant Representations (PDA-008), where the matter of the breeding season BDMPS reference population as a basis for the Mona Offshore Wind Project alone assessment is addressed.	Noted

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.58	56. In the offshore ornithology EWG07 meeting (APP-042, section D.8.1, agenda item no.2), we agreed to disagree on EIA breeding reference population "RB - We will need to "agree to disagree" on other species but for Northern gannet and Manx shearwater the lower number should be used", the lower value meaning whichever is lower between the SNCB approach and the applicant's proposed approach. Our agreement log (APP-042, section D.9, item 13) maintains our disagreement with the proposed approach.		
REP1-066.59	57. The Applicant states in Section 5.3.9.12 of Volume 2, Chapter 5: Offshore ornithology (APP-057) that "During the seventh EWG meeting (held 8 December 2023) [APP-042, section D.8.1, item no. 2], it was agreed that for the project alone assessment, foraging range populations could be used, however if the foraging range population is greater than the regional seas populations (BDMPS from Furness, 2015) then impacts would also be assessed against this population." This		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	doesn't accurately reflect the discussion or minutes of the offshore ornithology EWG07 meeting (APP-042, section D.8.1, agenda item no. 2). Our advised approach remains to consider breeding adult birds at colonies within the relevant BDMPS in which the project is located, plus the immatures associated with those colonies. Data should come from the tables in Appendix A of Furness (2015) for both breeding adults and immatures.		
REP1-066.60	Population Viability Analysis Volume 2, Chapter 5: Offshore ornithology (APP-057) sections 5.7.2.105 to 5.7.2.106 58. We note the lack of PVA for common guillemot against the reference population relevant to the 1% baseline mortality trigger prompting the need for a PVA within the ES. It is acknowledged that during the breeding season the worst-case scenario of 70% displacement and 10% mortality, an increase in baseline mortality greater than 1% is predicted for common guillemot. However, it is then stated that for a more realistic 50% displacement and	The Applicant notes the JNCC's comment and maintains that an assessment using population viability analysis (PVA) based on the worst-case scenario of 70% displacement and 10% mortality is overly precautionary for the Mona Offshore Wind Project alone and welcomes the JNCC's advice that they "would not base our advice solely on the worst case likely scenario". The Applicant has provided a PVA for the cumulative impact on common guillemot within Volume 6, Annex 5.6: Offshore Ornithology Population Viability Analysis Technical Report (APP-096). Volume 6, Annex 5.6: Offshore Ornithology Population Viability Analysis Technical Report (F6.5.6 F02) has been resubmitted at Deadline 2 to address errata within the cumulative effects assessment (as identified in the Errata Sheet (REP1-044) submitted at Deadline 1 and the Schedule	The evidence set out in REP1-066.40 above demonstrates both the variability displacement and mortality rates, and 70% displacement and/or 10% mortality is not inconceivable for common guillemot and is not therefore overly precautionary. Our advice has consistently been to example the full range of displacement and mortality rates for each species, and where any combination of these would result in mortality of 1% of baseline mortality, PVA is required. We have also consistently stated that our advice would not be based solely on the worst-case scenario, but it is important to examine the full including the worth case in order to understand the consequences of the worst case and the likelihood that that magnitude of impact would occur.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	5% mortality, the increase in baseline mortality would be 0.52% and therefore below the 1% threshold. This appears to suggest that the impacts from only the Applicant's preferred displacement and mortality rate are used to calculate whether 1% baseline mortality is passed, and whether a PVA is required. We advise that the full range of displacement and mortality rates should be used to calculate if and where the impact crosses the 1% baseline mortality threshold for taking through to PVA. Whilst we would not base our advice solely on the worst-case likely scenario, it is important to look at the range of likely scenarios in order to determine whether there is a realistic possibility of impact that would need further consideration.	of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) submitted at Deadline 2). Within Volume 6, Annex 5.6: Offshore Ornithology Population Viability Analysis Technical Report (APP-096), the full range of impacts from 30% displacement and 1% mortality up to 70% displacement and 10% mortality is presented. The results of the cumulative PVA indicate that the population is likely to increase in size under all of the impact scenarios. This further justifies the reasoning for not presenting a PVA for the Mona Offshore Wind Project alone as the impact would be smaller than the one predicted for cumulative impacts.	
REP1-066.61	59. It is stated that PVAs have been carried out on two Sites of Special Scientific Interest (SSSI) breeding colonies. It is not clear why impacts have been assessed against those colony populations, when the reference population against which the predicted displacement mortalities were assessed was the foraging range	Please see row RR-033.14 of the Applicant's Response to Relevant Representation (PDA-008), where this point is addressed in paragraph 5.7.2.107 to 5.7.2.109 in Volume 2, Chapter 5 Offshore Ornithology (F2.5 F02). In summary, PVAs were undertaken at the request of NRW for these two Welsh SSSIs (Pen y Gogarth/Great Ormes Head SSSI and Creigiau Rhiwledyn/Little Ormes Head SSSI)	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	breeding BDMPS population. We would expect to see a PVA carried out for the breeding season alone impact mortalities against the breeding season reference population. However, we don't consider that this makes a material difference to the outcomes of the impact assessment.	following apportioning of the breeding season impacts to these two sites.	
REP1-066.62	Volume 2, Chapter 5: Offshore ornithology (APP-057) section 5.7.5.13 60. We note the lack of PVA for breeding season collision impacts to great black-backed gull. Predicted collisions are above 1% baseline mortality during the breeding season, yet a PVA has not been carried out. Therefore, we would expect to see a PVA carried out for the breeding season alone impact mortalities against the breeding season reference population. However, we don't consider that this makes a material difference to the outcomes of the impact assessment.	The Applicant notes that this matter was raised in the JNCC's Relevant Representation (RR-033), and a response was provided in the Applicant's Response to Relevant Representations (PDA-008) (see row RR-033.16) submitted at the Procedural Deadline. The Applicant has provided an updated population viability analysis (PVA) for the cumulative impact on great black-backed gull in Volume 6, Annex 5.6: Offshore Ornithology Population Viability Analysis Technical Report (F6.5.6 F02) submitted at Deadline 2. This uses both the species-group and species-specific avoidance rates. The results of the cumulative PVA indicate that the population is likely to increase in size under all of the impact scenarios. This further justifies the reasoning for not presenting a PVA for the Mona Offshore Wind Project alone.	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.63	Volume 6, Annex 5.6: Offshore ornithology population viability analysis technical report (APP-096) Table 1.4 61. The BDMPS and baseline mortality values for great black-backed gull appear to be associated with the wrong seasons. For the annual assessment the BDMPS should be 44,753 with a baseline mortality of 4,252. For the non-breeding season, the BDMPS population should be 17,742 with a baseline mortality of 1,685. The PVA logs in Appendix A2.1 and A2.2 appear to have associated the correct reference populations per season, therefore the PVA itself appears to have used the correct values, but the values in Table 1.4 are incorrect. Hence, we don't consider that this makes a material difference to the outcomes of the impact assessment.	The Applicant acknowledges a discrepancy in the heading of table 1.4 of Volume 6, Annex 5.6: Offshore ornithology population viability analysis technical report (APP-096). This has been rectified in an update to this document submitted document at Deadline 2.	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.64	Volume 6, Annex 5.6: Offshore ornithology population viability analysis technical report (APP-096) Table 1.12 and 1.13 62. The extremely high predicted growth rates associated with great black-backed gull are at odds with the general trend in Global and European (where non-breeding great black-backed gull in UK waters are likely to originate) and UK breeding populations being that of decline (albeit with range expansion). For example, Burnell et al. (2023) highlights the overall declines in breeding great black-backed gull in Britain and the UK since the previous national census (Seabird 2000) of -55% and -52%, respectively. England has suffered a smaller decline (3%), with the breeding population of the Isles of Scilly increasing slightly (14%). Given the overall picture of decline, we question whether increases in population of ~12,000% predicted by the PVA would ever be realised in reality, and hence the reliability of the PVA predictions. We	The Applicant notes that concerns regarding the population viability analysis outputs for great black-backed gull was raised in the JNCC's Relevant Representation (RR-033), and a response were provided in the Applicant's Response to Relevant Representations (PDA-008) (see row RR-033.29) submitted at the Procedural Deadline.	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	strongly recommend a sense check of the PVA input and outputs before having reliance on the outputs. An obviously unrealistic outcome of the PVA does not provide confidence that the results can be relied upon, therefore we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.		
REP1-066.65	Cumulative and in-combination assessments Volume 2, Chapter 5: Offshore ornithology (APP-057) section 5.9 63. We maintain our disagreement over the approach to cumulative (EIA) and in-combination assessments (HRA), and specifically the inclusion of projects with unquantified levels of impact (either because modelling techniques have changed, or their impacts were not quantitatively assessed), and this disagreement has been raised in Preliminary Environmental Information Report (PEIR) responses (APP-040, D.25.11, Unique Reference Identifier Mon_060_101_010623). In October	The Applicant notes the JNCC's comment. The Applicant has considered the advice of the statutory nature conservation bodies (SNCBs) to the Mona Offshore Wind Project regarding a hierarchal method to quantify impacts from historical offshore wind projects in the Irish Sea. In response to Section 42 comments on the Preliminary Environmental Information Report (PEIR) and the bespoke advice provided by the SNCBs (outlined in Section D.6.13 of Appendix D of Technical Engagement Plan APP042), the Applicant updated the cumulative effects assessments (CEAs) and in-combination assessments ahead of application. The updates incorporated quantitative assessment information for historical projects where this was available from project documentation and presented in a useable format (e.g., provided a monthly breakdown of abundances or impacts). In the absence of quantitative assessment information for historical projects, a qualitative assessment using project-specific documentation was included in the CEAs presented in Volume 2, Chapter 5:	As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	2023, the SNCBs supplied bespoke advice to the Mona, Morgan generation and Morecambe generation projects (Proposed methodology for 'gap-filling' the Irish Sea R4 cumulative & in-combination assessments, circulated by Natural England (APP-042, section D.6.13)), providing a suggested approach to filling in gaps in data on impacts from relevant projects for cumulative/in-combination assessment. The Applicant has not followed this approach and has presented a qualitative approach for the projects with no data. We do not consider that the qualitative assessments presented by the Applicant are sufficient and do not consider that robust conclusions can be drawn to rule out there being an adverse effect without reasonable scientific doubt, regarding the accumulating scale of impact to some species. We therefore reiterate that our advice for a pragmatic method to address the lack of impact assessments for a number of historical Offshore Wind Farms (OWFs) in the region remains as detailed in the original SNCB advice.	Offshore ornithology (APP-057) and the in-combination assessment presented in the HRA Stage 2 ISAA Part Three: Special Protection Areas and Ramsar sites Assessments (APP-033). The Applicant maintains that the assessment approach presented in Volume 2, Chapter 5: Offshore ornithology (APP-057) and the in-combination assessment of the HRA Stage 2 ISAA Part Three: Special Protection Areas and Ramsar sites Assessments (APP-033) is robust and includes sufficient detail to conclude beyond reasonable scientific doubt no significant effects and no adverse effect on integrity from the Mona Offshore Wind Project alone and in-combination with other plans and projects. However, noting SNCBs concerns raised pre- and post-application with respect to the potential contribution of historical projects to the offshore ornithology CEAs and in-combination assessment for the Mona Offshore Wind Project, the Applicant has undertaken a 'gap-filling' exercise in accordance with SNCBs advice (which is presented in Section D.6.13 of Appendix D of Technical Engagement Plan APP-042) to generate indicative estimates for currently unquantified impacts from historical projects. This information is intended to further facilitate the SNCB's understanding of the total quantitative cumulative and in-combination impact for offshore ornithology. The Applicant is currently engaging with the SNCBs on the results of the gap-filling exercise for the Mona Offshore Wind Project and anticipates being able to submit information with respect to this for examination at Deadline 3.	

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.66	Volume 2, Chapter 5: Offshore ornithology (APP-057) sections 5.9.2, 5.9.3, and 5.9.4 64. In the cumulative assessment, the abundance estimates at Erebus offshore wind farm are incorrect for several species. This was also the case in the Section 42 PEIR (Mona Offshore Wind Ltd. (2023), Volume 2: Chapter 10 Offshore ornithology, table 10.49, table 10.53, and table 10.59), and JNCC responded to these errors in our Section 42 PEIR response (APP-040, D.25.11, Unique Reference Identifier Mon_060_100_010623). However, the same errors remain. The abundance estimates to use should be those within Table 5-1 for common guillemot and Table 5-3 for Atlantic puffin in Blue Gem Wind (2022). The abundance estimates for Northern gannet should be those within Table 23 of HiDef (2021). The abundance estimates for blacklegged kittiwake should be those within Table 18 to 20 of HiDef (2021). Without these errors and other errors being fixed, we cannot agree the results of the EIA and HRA rule out there being an	The Applicant notes the JNCC's comments. The Applicant notes that discrepancies within the cumulative effects assessment (CEA) tables were raised in JNCC's Relevant Representation (RR-033) and a response provided in the Applicant's Response to Relevant Representations (PDA-008) (see row RR033.19) submitted at the Procedural Deadline. All of the CEA tables have been updated within Volume 2, Chapter 5: Offshore ornithology (F2.5 F02) submitted at Deadline 2 to account for errata identified in the Errata Document submitted at Deadline 1 (REP1-004) and any further discrepancies considered to be errata identified in NRW's and the Joint Nature Conservation Committee's Written Representations (REP1-056; REP1- 066/REP1-067, respectively). The Applicant refers the JNCC to the Schedule of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) submitted at Deadline 2 for further information. The Applicant can confirm that the amendments to Volume 2, Chapter 5: Offshore ornithology (F2.5 F02) do not alter the conclusions presented.	(this comment provides JNCC's response to the Applicant's response set out at REP1-066.66, which also covers REP1-066.67 and REP1-066.68) As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	adverse effect beyond reasonable scientific doubt.		
REP1-066.67	Volume 2, Chapter 5: Offshore ornithology (APP-057) sections 5.9.3 and 5.9.4 65. In the cumulative assessment, the collision estimates for Northern gannet at Erebus are incorrect in Table 5.128. The collision estimates to use should be those within Table 5-31 of Blue Gem Wind (2022). Without this and other errors being fixed, we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.		
REP1-066.68	Volume 2, Chapter 5: Offshore ornithology (APP-057) sections 5.9.2, 5.9.3, and 5.9.4 66. Impacts in the cumulative tables often do not add up to the totals at the foot of the tables, and have multiple other errors in them, such as figures apparently attributed to the wrong wind		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	farms, seasonal impacts not adding up to annual impacts. Without this error and other errors being fixed, we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.		
REP1-066.69	Volume 2, Chapter 5: Offshore ornithology (APP-057) section 5.9.3 67. For the ES cumulative assessment, it appears that collision estimates from other offshore wind farm projects have been adjusted to account for different avoidance rates. However, it is not stated that this has been done, nor how this has been done. Therefore, we cannot replicate the findings, or determine whether the method or results are correct. Without this being clarified, we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.	The Applicant notes that cumulative collision estimates from other offshore wind projects and the adjustment for difference avoidance rates were raised in JNCC's Relevant Representation (RR-033), and a response provided in the Applicant's Response to Relevant Representations (PDA-008) (see row RR033.21) submitted at the Procedural Deadline.	We thank the Applicant for the clarification. As per our advice in our comments on the Applicant's Response to Relevant Representations (PDA-008), We strongly recommend that the fact that this has been done, and how it has been done, is described in the relevant cumulative and in-combination sections of the EIA and HRA. We strongly recommend that this is done by providing revised versions of affected chapters. This would prevent potential misunderstanding by future projects when looking to carry out in-combination and cumulative assessments.
REP1-066.70	Part Three: Special Protection Areas and Ramsar sites Assessments (APP-033) section 1.4.6.3	The Applicant notes that the baseline mortality threshold for in-combination assessment was raised in JNCC's Relevant Representation (RR-033), and a response provided in the Applicant's Response to Relevant Representations (PDA-	We thank the Applicant for the clarification. We maintain that whilst this approach may be appropriate for this project, where predicted impacts

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	68. The threshold of using 0.05% baseline mortality from the project alone to screen whether impacts should be considered in-combination was not raised by the applicant during EWG meetings or subsequently, and therefore JNCC has not agreed to this approach. We recommend that the Applicant be clear on what this percent increase in baseline mortality would be in absolute mortality terms. We are not aware that similar thresholds have been applied in other cases to screen projects in or out from incombination assessment. We request that the Applicant provide justification for the appropriateness of this approach.	008) (see row RR-033.38) submitted at the Procedural Deadline.	from the project alone are likely very small, it may not be appropriate in all cases, particularly where designated sites are already close to or at levels already considered to be of an adverse effect or have conservation objectives relating to restoration. We do not consider that further work by the Applicant is required in regard to this aspect of the in-combination assessment.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.71	SPA features HRA Stage 1 Screening Report (APP-034) Table 1.68 69. Throughout the HRA, the qualifying features of Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA appear to be incorrect. We recommend the features and assemblages are carefully checked against the SPA designation information (JNCC, 2019), and the details within the HRA updated. We have advised on errors in the description of features of Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA during the Section 42 PEIR response (APP-040, D.25.11, Unique Reference Identifiers Mon_060_089_010623, Mon_060_116_010623, Mon_060_117_010623, Mon_060_118_010623, and Mon_060_124_010623), yet the errors remain.	The Applicant notes that the presentation of the qualifying features of Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA in the HRA application materials was raised in JNCC's Relevant Representation (RR-033), and a response provided in the Applicant's Response to Relevant Representations (PDA-008) (see row RR-033.35) submitted at the Procedural Deadline. The Applicant can confirm that discrepancies identified in the Errata Sheet (REP1-004) submitted at Deadline 1 have been addressed in updates to Volume 2, Chapter 5: Offshore ornithology (F2.5 F02), the HRA Stage 1 Screening Report (E1.4 F02) and the HRA Stage 2 ISAA for SPAs and Ramsar sites Assessments (E1.3 F02) submitted at Deadline 2. The Applicant refers the JNCC to the Schedule of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) submitted at Deadline 2 for further information. The Applicant can confirm that the amendments to these application documents do not alter the conclusions presented.	We thank the Applicant for the amendments to affected application documentation. Please see our comments to response to REP1-066.10 on apportioning of mortality of Atlantic puffin and in-combination assessment. As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.72	Part Three: Special Protection Areas and Ramsar sites Assessments (APP-033) section 1.6.3.44 70. We disagree with the interpretation that birds on migration are not specifically part of the Liverpool Bay/Bae Lerpwl SPA citation and therefore are not considered part of the non-breeding season assemblage. The SPA citation refers to non-breeding birds. There are no breeding red-throated divers in England or Wales, and therefore any birds present within the SPA will be non-breeding birds (even when present during the defined breeding season cited). We therefore do not agree that they can be discounted as not part of the protected population. We note that as per the SPA Conservation Advice (Natural England (NE), Natural Resources Wales (NRW) and the Joint Nature Conservation Committee (JNCC), 2022), April and September represent months where smaller numbers of this species can be expected, and significant Impact and Adverse Effect on Integrity (AEOI) is less likely than in 'core' months of the	The Applicant notes that the non-breeding season assemblage feature of the Liverpool Bay/Bae Lerpwl SPA was raised in JNCC's Relevant Representation (RR-033), and a response provided in the Applicant's Response to Relevant Representations (PDA-008) (see row RR-033.40) submitted at the Procedural Deadline. The Applicant can confirm that discrepancies identified in the Errata Document submitted at Deadline 1 (REP1-004) have been addressed in an update to the HRA Stage 2 ISAA for SPAs and Ramsar sites Assessments (E1.3 F02) submitted at Deadline 2. Please see the Schedule of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) submitted at Deadline 2 for further information. The Applicant is content that the assessment and conclusion of no adverse effect on site integrity presented in HRA Stage 2 Information to Support an Appropriate Assessment Part 3: Special Protection Areas and Ramsar Sites Assessments (APP-033) remains valid and welcomes the JNCC agreement on this point.	We thank the Applicant for the clarification.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	non-breeding period. We do not consider therefore that red-throated diver will occur in sufficient numbers and densities during the summer months (April to September) for there to be an impact of consequence for the Conservation Objectives of the site.		
REP1-066.73	HRA HRA Stage 1 Screening Report (APP-034) 71. There are multiple discrepancies between the main text of the HRA Stage 1 Screening Report and the appendix tables of the same document. All values (text and tables) must be double-checked and updated where necessary. The HRA Stage 1 Screening Report provides very little information to cross reference which values from other documents have been used, and through what calculation, in order to generate results. Therefore, it is nearly impossible to follow what values have or have not been used. We strongly recommend that the HRA Stage 1 Screening Report contains a clear audit trail of what values and	Please refer to the Applicant's response to REP1-066.6 to REP-066.9.	We welcome this and look forward to commenting on the revised assessments submitted at Deadline 3 in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	parameters have been used, where they have been used, and how they have been applied. Without this, we cannot confidently replicate the results, and hence we cannot agree the results of the EIA and HRA rule out there being an adverse effect beyond reasonable scientific doubt.		
REP1-066.74	HRA Stage 1 Screening Report (APP-034) section 1.4.6.30 72. While we have accepted the Applicant's general approach to Likely Significant Effect screening (i.e. carrying out a displacement and collision risk assessment at the LSE stage and apportioning impacts to SPAs) and Appropriate Assessment (i.e. assessing anything more than 0.0 mortalities) in this case, JNCC has consistently advised the Applicant throughout the pre-application process that the LSE test is a course filter, and an LSE should be considered to exist where there are instances of qualifying features with potential protected site connectivity and an impact pathway (see advice given during pre-application meetings (APP-042, D.4.4), our response to the Section 42 PEIR	The Applicant notes and welcomes the JNCC's agreement with the approach to Likely Significant Effects screening and Appropriate Assessment for the Mona Offshore Wind Project.	This is noted.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	(APP040, Table D.25.11), and as summarised in Table 1.2 of the HRA Stage 1 Screening report (APP-034).		
REP1-066.75	73. In our view, the screening presented in this application has gone beyond an assessment of whether an impact pathway has the potential to compromise the ability of the site to meet its conservation objectives, and has additionally examined the magnitude of impact, as apportioned to each relevant MPA, and whether this would represent an LSE. In this case, no relevant site features have been screened out of Appropriate Assessment that should not have been.	The Applicant notes the JNCC's comment and welcomes agreement that all site features have been considered appropriately within the HRA Stage 1 Screening Report (APP-034).	This is noted.
REP1-066.76	74. However, the principles established in statute and case law (i.e. whereby those constituent elements of the plan or project which are (a) not directly connected with or necessary to the management of the European Site(s) features and (b) could conceivably adversely affect a	The Applicant notes the JNCC's comment.	

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	European site, would have a likely significant effect, either alone or in combination with other plans and projects, upon the European sites and which could undermine the achievement of those conservation objectives) ensure the consistent and systematic examination of the potential of a plan or project to cause harm to an MPA and the magnitude to which it may do so. We are of the view that the approach taken by the Applicant may not be appropriate for projects where the magnitude of impact may be expected to be larger (for example where greater densities of birds would be expected and/or larger scale projects, resulting in potentially greater absolute mortality predictions) and risks site features being excluded from further assessment inappropriately.		

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Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.77	HRA Stage 1 Screening Report (APP-034) section 1.4.6.49 75. As far as we are able to calculate, we generate different values of apportioned adult impacts for at least great black-backed gull and black-legged kittiwake compared to those in the HRA Stage 1 Screening Report (APP-034) appendix Tables A6, A7, and A12, for example. Due to the unclear method and values used (e.g. our comments in paragraphs 25, 26 to 33, 49 to 51, 52, and 53), it is not known whether there are errors in the calculation, or a different method has been applied, or different values are being used, to those we assume are used. We recommend a thorough check of the values and calculations used to generate the results in the HRA Stage 1 Screening Report, and that the values and method of apportioning impacts are fully presented. Without these, we cannot confidently replicate the results, and hence we cannot have confidence in the results and hence we cannot agree the results of the EIA and HRA	Please see row RR-033.36 of the Applicant's Response to Relevant Representations (PDA-008), where a worked example for great black-backed gull from the Isles of Scilly SPA is presented. Please also see the Applicant's response for REP1-066.12.	We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course. Specially on the great black-backed gull example, we note that the worked example provided used stable age-class structures from Furness 2015 rather than age class derived from DAS data, and used split months in determining seasons. We note that this will be superseded by the submission of additional information to be submitted at Deadline 3.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	rule out there being an adverse effect beyond reasonable scientific doubt.		
REP1-066.78	Part Three: Special Protection Areas and Ramsar sites Assessments (APP-033) 76. We disagree with several elements of the assessment to offshore ornithology within the HRA. In addition, there are multiple errors within the tables and text, and errors when using values in subsequent stages of the assessment. Many aspects of the assessment are difficult to follow what has been done or where values have come from. Due to these disagreements, errors, and lack of clarity, we do not have confidence in	The Applicant has submitted an update to the HRA Stage 2 ISAA Part 3: SPAs and Ramsar sites Assessments (E1.3 F02) at Deadline 2, which amends several aspects of the Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA assessment in light of the JNCC's Relevant Representations (RR-033).	We thank the Applicant for the amendments to affected application documentation. Please see our comments to response to REP1-066.10 on apportioning of mortality of Atlantic puffin and in-combination assessment. As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077) and in responses to Examining Authority's written Question Q1.10.3 to the Applicant (PD-013).

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	the results, nor are we able to agree with the overall conclusions of the HRA, particularly with regards to Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA, in either the HRA Stage 1 Screening Report (APP-034) Table 1.68 and paragraph 1.4.6.49 or Part Three: Special Protection Areas and Ramsar sites Assessments (APP-033) Table 1.18 and paragraphs 1.5.3.34 to 1.5.3.37.		We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course.
REP1-066.79	Part Three: Special Protection Areas and Ramsar sites Assessments (APP-033) section 1.6.3.44 77. Note that predicted works (cable repair and reburial) would not need to occur concurrently in order to have the predicted impacts (just within the same non-breeding season). However, we welcome that the assessment is based on the total predicted habitat loss, irrespective of when it may occur. We don't consider that this makes a material difference to the outcomes of the impact assessment.	The Applicant notes and welcomes the JNCC's comment.	

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.80	Ornithology Conclusion 78. We disagree with several elements of the assessment to offshore ornithology within the ES and the HRA. In addition, there are multiple errors within the tables and text, and errors when using values in subsequent stages of the assessment. Many aspects of the assessment are difficult to follow in terms of what has been done or where values have come from. Due to these disagreements, errors, and lack of clarity, we do not have confidence in the results, nor are we able to agree with the overall conclusions, either within the EIA or the HRA, particularly with regards to Skomer, Skokholm and the Seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro Special Protected Area (SPA).	Please see the Applicant's response to REP1-066.6 and REP1-066.78.	We thank the Applicant for the amendments to affected application documentation. Please see our comments to response to REP1-066.10 on apportioning of mortality of Atlantic puffin and in-combination assessment. As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077) and in responses to Examining Authority's written Question Q1.10.3 to the Applicant (PD-013). We welcome the Applicant's intention to provide further information at Deadline 3 and look forward to commenting on the revised assessments in due course.
REP1-066.81	79. The Applicant has undertaken to produce an Errata document to highlight where errors in the assessment have been made and what the values should have been, which JNCC welcomes. However, we also advise that it is for the Applicant	Please see the Applicant's response in REP1-066.1 and REP1-066.6.	As well as this document, at Deadline 3 JNCC is also submitting comments on the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2 (REP2-077). In general terms we welcome the response of the Applicant, and look forward to commenting on the revised assessments in due course.

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
	to provide the necessary information for an HRA to be conducted, and that it needs to be demonstrated beyond reasonable scientific doubt that there would not be an Adverse Effect on the Integrity of a UK MPA network site. Similarly, it is for the Applicant to provide the necessary information for a judgement of the significance of effect at an EIA scale. As the application currently stands, we do not consider that there is sufficient confidence in the results of the assessments that would support a sound decision of no Adverse Effect on Integrity/no Significant Environmental Effects. Further, we are concerned that only providing an Errata document would not provide confidence that errors did not, in fact, make a material difference to the results of the assessment, and that affected modelling/assessment should be re-run and the results provided in revised application documentation (ES, HRA and associated documents).		

Reference	Written Submission Comment	Applicant's response in Table 2.1 of REP2-081	JNCC Comments
REP1-066.82	80. We have referred to Applicant's responses (PDA-008) to our Relevant Representations where we consider it helps to illustrate JNCC's position on the issues highlighted, but at the time of submission of these Written Representations have not had the opportunity to fully consider and respond to those comments. We shall provide any detailed comments we have at Deadline 2.	The Applicant notes the JNCC's comment.	JNCC notes the Applicant's response.

Benthic ecology (offshore) comments

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.138	126. The following advice relates to the offshore environment, extending out from the 12nm limit. For benthic ecology advice within 12nm, we defer to Natural Resources Wales (NRW).	The Applicant notes JNCCs response.	JNCC notes the Applicant's response.
REP1-066.139	Overall comments 127. JNCC are of the opinion that not all seabed impacts have been fully considered and it is not always clear that the correct footprint values have been utilised within the analysis or between chapters. Further detail of this is provided in the below sections.	The Applicant notes JNCCs response and has responded to these points under the individual comments below.	JNCC notes the Applicant's response.

REP1-066.140	128. JNCC do not agree with the values attributed within the assessment of significant effects, covered in Sections 2.9, page 92, and 2.11, page 235, of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054). The magnitude of impact has been assessed as too low, incorrect assumptions of feature sensitivity have been applied to the sea pens and burrowing megafauna communities Important Ecological Features (IEF), and the subsequent adverse significance has been under-represented. As an example, taking the 'as is' situation with a 'Low' magnitude of impact and a 'High' sensitivity, the adverse significance would be 'Minor or Moderate', as detailed on page 17 of Volume 1, Chapter 5: Environmental Impact Assessment methodology (APP-052), but has been reported as 'Minor'. We believe it would be more appropriate to take the worst-case scenario and apply a 'Moderate' adverse significance. We would therefore recommend that, as a minimum, all significance of effects be reassessed taking into account	As set out in the Applicant's response to JNCC's RRs (RR-033.87), the assessments presented in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054) have been undertaken to ensure the most precautionary sensitivity is applied when combining pressures. The site-specific benthic surveys identified very few burrows at stations where soft sediment was dominant. In combination with an absence of seapens and the predominantly gravelly sediment, it was concluded that these areas only had a negligible resemblance to the 'seapens and burrowing megafauna communities' habitat. Therefore, a precautionary approach was adopted for stations where burrows were observed at an average SACFOR of 'frequent', and these stations were, for the purposes of the assessment, assumed to represent the 'seapens and burrowing megafauna communities' habitat. The sensitivity allocated to the seapens and burrowing megafauna communities Important Ecological Feature (IEF) was based on the high sensitivity allocated in the Marine Evidence based Sensitivity Assessment (MarESA) to the relevant impacts (abrasion/disturbance at the seabed, penetration of the substratum subsurface and heavy smothering). This sensitivity rating is primarily driven by the fragile nature of seapens as an epifaunal species. The site-specific surveys identified few burrows and no seapens within the Mona Offshore Wind Project therefore, the sensitivity associated with this habitat was reduced to medium. An example of expert judgement being applied in regard to sensitivity is in the environmental statement for the consented Awel Y Môr Offshore Wind Farm. The benthic	JNCC welcomes the Applicant's use of the precautionary principal in identifying the habitat as 'seapens and burrowing megafauna communities'. Based on the precautionary principal, JNCC would expect to see the identified habitat assessed against the sensitivity for that habitat, irrespective of whether that habitat was identified on a precautionary basis or not. As it stands, the Applicant has adopted the precautionary principal in identifying the habitat but has not adopted the precautionary principal when assessing the habitat's sensitivity. Our position, therefore, remains unchanged. Please also see JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.71)

	the worst-case scenario. In Section 5.3.6.8 and Table 5.4, page 14, of Volume 1 Chapter 5: Environmental Impact Assessment methodology (APP-052), the spatial extent of the impact is defined as "Geographical area over which the impact may occur". Including the whole licence area as the spatial extent is not proportionate to the identified impact pathway especially if the whole area has no opportunity to be impacted. This then gives an unrealistic percentage of impact area and subsequently a magnitude of impact that is not representative. Some more detailed examples are covered for specific sections below but we would recommend that all magnitude of impacts are re-assessed taking this into account.	subtidal and intertidal ecology chapter for this project (Awel Y Môr Offshore Wind Farm Ltd., 2022) states that the infralittoral mixed sediment habitats were deemed to have a medium sensitivity to abrasion and disturbance. However based on the widespread distribution of the identified habitats and communities around the UK the infralittoral mixed sediment habitats were instead attributed a sensitivity of low. Therefore, the Applicant considers that the assessment of the 'seapens and burrowing megafauna communities' habitat is sufficiently precautionary in this regard. Furthermore, to have adopted the full MarESA sensitivities, without amending for the particular sensitivity of seapens, would have over-estimated the impact to the specific habitat present in the Mona Offshore Wind Project. The Applicant is confident that the impacts to the seapens and burrowing megafauna communities Important Ecological Features will be no greater than minor adverse significance and are therefore not significant in EIA terms (Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054)). In accordance with the EIA methodology followed for the Mona Offshore Wind Project, as detailed in Volume 1, Chapter 5: Environmental Impact Assessment methodology (APP-052), where a range is suggested for the significance of effect, there remains the conclusion of minor adverse significance was determined due to the small scale of the work in the intertidal zone. Table 5.4, of Volume 1, Chapter 5: Environmental Impact Assessment methodology of the ES (APP-052) explains that topic-specific definitions for the magnitude categories are provided in each of the topic chapters. The definitions relevant to the assessment of magnitude for benthic subtidal	

		and intertidal ecology are as outlined in Table 2.14 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054). The assessments of magnitude have been based on the total areas of habitat disturbance/loss (in m2/km2) with percentages of the project areas affected presented to provide additional context. possibility that this may span the significance threshold (i.e. the range is given as minor to moderate). In such cases, the final significance is based upon the topic expert's professional judgement as to which outcome delineates the most likely effect, with an explanation as to why this is the case. Where this has been undertaken in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054), explanations are provided in the text to support the conclusions. This approach is supported by the general approach described in the Design Manual for Roads and Bridges, which suggests an evidence-based approach when reviewing the multiple outcomes presented in the conclusion of the effects matrix, as applied in this scenario regarding the lack of seapens identified in the site-specific surveys. This approach has been applied throughout Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054). For example, in paragraph 2.9.2.47, for the littoral sand and muddy sand supporting infaunal communities IEF, the low magnitude and high sensitivity resulted in a minor or moderate result in the significance matrix. A	

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.141	129. Throughout the Environmental Statement and dDCO documentation there is little distinction between inshore and offshore, distinguished by the 12nm/territorial waters limit. Given the remit of Statutory Nature Conservation Bodies (SNCBs; i.e. JNCC and Natural Resources Wales, NRW) is divided based on this factor it would be helpful to have impacts, activities, and habitats broken down into these remits to allow JNCC to provide an accurate assessment. In particular, it would have been useful to have this delineation identified on all the maps provided and for benthic habitats and impacts that span the offshore and inshore to be assessed based on their offshore/inshore location. JNCC were unable to accurately assess benthic impact of the operations within the offshore environment due to impacts not being attributed directly to the offshore area (extending out from 12nm). This is of particular concern in relation to the export cables and the impacts on sandwave clearance.	The Applicant has considered the Mona Offshore Wind Project as a whole and has not divided the assessment of potential impacts by stakeholder remit or geography. The 12 nm limit, in particular, does not correspond to a natural boundary for the Mona Offshore Wind Project, as, for example, this would split the offshore cable route. The NRW Marine Licencing team have responsibility for discharging the marine licence conditions which are attached to the standalone and deemed marine licences and will consult with the appropriate bodies through that process. The 12 nm limit for inshore waters is marked on figures in a number of chapters including figure 2.1 of Volume 2, Chapter 2: Benthic, subtidal and intertidal ecology (APP-054) as well as figure 1.1 Volume 1, Chapter 1: Introduction and overarching glossary (APP-048), figure 3.2 Volume 1, Chapter 3: Project description (APP-050), figure 4.1 of Volume 1, Chapter 4: Site selection and consideration of alternatives (APP-051), figure 1.1 of Volume 2, Chapter 1: Physical processes (APP-053) and the Location Plan (APP-006). Considering the aforementioned reasons, no further delineation of plans is proposed.	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.3), JNCC's remit, including under marine licences, extends out from 12nm. Inclusion of the 12nm limit allows us to assess any potential benthic impact to the offshore environment. Therefore, distinguishing between the inshore (within 12nm) and offshore (beyond 12nm) environment is required when assessing marine benthic impacts. We appreciate that this would split the offshore cable route and habitats but without this split we cannot assess the impact accurately. This is of particular concern in relation to the export cables and the impacts resulting from sandwave clearance.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.142	Comments on specific elements Decommissioning 130. JNCC have concerns around the expected decommissioning of the infrastructure, in particular around the decommissioning of gravity-based infrastructure and the full removal of all cables. Lessons learnt from the oil and gas industry have shown that the decommissioning of gravity-based infrastructure is not always feasible, or possible, leading to permanent habitat change. The impacts of this scenario should be considered.	As set out in the Applicant's response to JNCC's RRs (RR-033.73), section 3.13 of Volume 1, Chapter 3: Project description (APP-050) states that no offshore decommissioning works will take place until a written decommissioning programme has been approved by the Secretary of State for the Department for Energy Security and Net Zero, a draft of which will be submitted prior to the construction of the Mona Offshore Wind Project. The scope of the decommissioning works would be determined by the relevant legislation and guidance at the time of decommissioning (i.e. including latest guidance on best practice for the decommissioning of cables). Gravity based infrastructures will all be removed upon decommissioning of the Mona Offshore Wind Project. At the end of the operational lifetime of the Mona Offshore Wind Project, the maximum design scenario for hard substrate removal includes the removal of all structures above the seabed or ground level including wind turbine foundations (including gravity based foundations), OSP foundations, scour protection, cable protection and protection for cable crossing. However, the maximum design scenario for long term habitat loss however has assumed that cable protection and scour protection may be left in situ and the wind turbine foundations will be removed, including gravity based foundations. These are the scenarios that have been assessed in the Environmental Statement. Any deviation from this would be considered and assessed as part of the decommissioning programme at the time of decommissioning.	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.73), JNCC welcomes the Applicant's response here. However, this does not change our position.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.143	131. JNCC welcomes the proposal to remove all cabling from the Array Area and Cable Corridor. However, we note this is not covered in the draft Development Consent Order (AS-010). Based on our current experience, this is not always possible, especially when the cable is buried. Leaving buried cables in situ and removing unburied sections would normally include protection of the cut end with rock dump increasing the final footprint of the project. Although JNCC acknowledge future advancement of decommissioning technology may solve this issue, this scenario has not been considered.	As set out in the Applicant's response to JNCC's RRs (RR-033.74), the maximum design scenario for temporary habitat disturbance has assessed the removal of all cables, which could require the use of similar equipment as used to install the cables as set out in Section 3.13.2 of Volume 1, Chapter 3: Project description (APP-050). However, the Applicant has not committed to the removal of cables in the decommissioning phase and the decision on whether to remove offshore cables will be taken at the time of decommissioning in consultation with the relevant stakeholders. The project design assessed in the Environmental Statement does not include for additional cable protection to be installed at the point of decommissioning. Given the uncertainty regarding the relevant legislation and guidance at the time of decommissioning, deviation from this would be considered and assessed as part of the decommissioning programme at the time of decommissioning. Should rock bags be required to ensure that decommissioned cable ends do not become a hazard to navigation or fishing, a new Marine Licence would be required as part of the decommissioning plan (as stated in APP-050).	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.74), JNCC acknowledges that the maximum design scenario for temporary habitat disturbance has been assessed for the removal of all cables. The use of rock protection at cut ends would, however, be a permanent impact and, as per our initial comment, has not been assessed.
REP1-066.144	Volume 1, Chapter 3: Project description (APP-050) Section 3.5.4.3, page 10 (APP-050) 132. "If Mona infrastructure crosses any out of service cables, these will be removed where feasible." It is not clear if any remediation (i.e. rock	The Applicant can confirm that in relation to Section 3.5.4.3 of Volume 1, Chapter 3: Project Description (APP-050), any cable removal will be undertaken in consultation with the asset owner and in accordance with the International Cable Protection Committee (ICPC) guidelines (2011). Where feasible, cables will be retrieved to a vessel deck, where one end will be cut, the cable will be pulled past the crossing	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.75), JNCC welcomes the Applicant's response. However, the Applicant has not addressed our concerns around remediation at cut ends.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
	dump for protection) will be carried out on the cut ends of the out of service cables left on the seabed.	point, and then cut again before being pulled to the surface where it will be removed from site by the vessel.	
REP1-066.145	Table 3.4, page 12 (APP-050) 133. As the cable corridor includes both the inshore and offshore (outside 12nm) waters, it is not possible to determine the maximum design parameters for sandwave clearance in the offshore. We assume that the majority of sandwave clearance within this area will be inshore. However, this assumption may underestimate the actual impact on sandwaves located outside the 12nm territorial limit. Detailed information on the impact of activities on the offshore environment (occurring outside 12nm) is essential to allow for a full assessment of those impacts.	The Applicant has considered the Mona Offshore Wind Project as a whole and has not divided the assessment of potential impacts by stakeholder remit or geography. The 12 nm limit, in particular, does not correspond to a natural boundary for the Mona Offshore Wind Project, as, for example, this would split the offshore cable route. The maximum design scenario for sandwave clearance along the offshore export cable has not been sub-divided to offshore and inshore waters as the final requirements for sandwave clearance will be based on pre-construction surveys and final detailed design. This is set out in the construction method statement required to be approved by the licencing authority as secured under Schedule 14, Condition 18(1)(d) of the draft development consent order (C1 Draft Development Consent Order F03) and anticipated to be secured in the standalone marine licence (see the Marine licence principles document – J9 F03). Where potential impacts or parameters have been delineated, they have been divided by the applicable consenting process (i.e. by parameters to be secured under the draft DCO Requirements and deemed marine licence and those to be secured under the standalone marine licence). For example, the MDS presented in Table 2.18 of Volume 2, Chapter 2: Benthic, subtidal and intertidal ecology (APP-054) presents a breakdown of the MDS for	JNCC's remit, including under marine licences, extends out from 12nm. Inclusion of the 12nm limit allows us to assess any potential benthic impact to the offshore environment. Therefore, distinguishing between the inshore and offshore environment is required when assessing marine benthic impacts. We appreciate that this would split the offshore cable route and habitats but without this split we cannot assess the impact accurately and would have to apply a worst case scenario where all sandwave clearance is expected to occur in the offshore (outside the territorial limit of 12nm). For more detailed information we would refer to our response submitted at Deadline 3 to the Examiner's Questions (PD-013), question Q1.17.4.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
		temporary habitat disturbance/loss (which includes activities associated with sandwave clearance) relevant to activities within the Mona Array Area and the Mona Offshore Cable Corridor. All aspects of the Mona Offshore Wind Project, in both inshore and offshore waters, have however been assessed together in section 2.9.3 of Volume 2, Chapter 2: Benthic, subtidal and intertidal ecology (APP-054). The Applicant considers that this presents the SNCBs with transparency in how the MDS has been calculated from the project design for each impact to enable a full understanding of the impacts from the Mona Offshore Wind Project. The NRW Marine Licencing team have responsibility for discharging the marine licence conditions which are attached to the standalone and deemed marine licences and will consult with the appropriate bodies through that process.	

REP1-066.146	Table 3.11 and 3.12, page 22, and Tables 3.14 to 3.17, pages 25 to 28 (APP-050) 134. Values for the maximum seabed area (total foundations and scour protection for all foundations) were found to be incorrect in all six of the above listed tables and Table 4, page 154, of the draft Development Consent Order (AS-010). Assuming the values for the maximum seabed area per foundation and scour protection per foundation are correct, the total foundations and scour protection for all foundations values were found to be significantly underestimated (see table below). By our calculations, the following totals should be:	Volume 1, Chapter 3: Project description (APP-050) presents the maximum physical dimensions for each individual project design parameter (e.g. number of turbines or area of turbine footprint). These maximums have been selected from different design and construction options, not all of which have been presented in Volume 1, Chapter 3: Project description (APP-050). The values for maximum seabed area as specified in Table 3.11, 3.12, 3.14, 3.15 and 3.16 of Volume 1, Chapter 3: Project description (APP-050) for each of the foundation types are correct and accurate and will not be exceeded. The individual parameters for maximum number of foundations and maximum foundation/scour footprint per foundation presented in Volume 1, Chapter 3: Project description (APP-050) have not necessarily been multiplied together to generate the maximum design scenario for maximum seabed area. This is because not all of these parameters would occur in one option as it would represent an option that was not viable for the Mona Offshore Wind Project. For example, the foundation footprint associated with the smallest turbine option for a suction bucket jacket foundation (which equates to the largest number of turbines that may be installed to achieve the proposed capacity of the Mona Offshore Wind Project of over 350 MW) is smaller than that associated with the largest turbine option for the same foundation type (fewer of which will be required to achieve the proposed capacity). The maximum total seabed footprint for wind turbine generators (including scour protection) using jacket foundations with suction buckets of 735,488 m2 (as outlined in Table 3.14 of Volume 1, Chapter 3: Project description	The Applicant used Table 3.14 of Volume 1, Chapter 3: Project description (APP-050) as a working example. JNCC agree with the use of the maximum scour protection area of 10,012m^2 plus a maximum foundation area of 804m^2, however, Table 3.14 clearly states that the 'maximum number of jacket foundations' is 96 and not 68, as claimed by the Applicant. Based on the information provided within this table, the 'maximum seabed area – total foundations and scour protection for all foundations with suction bucket jackets (m^2)' is listed as 735,488m^2 and is not correct as it does not use the value stated in the table for the 'maximum number of jacket foundations' (i.e. 96). For the 'maximum seabed area – total foundations and scour protection for all foundations with suction bucket jackets (m^2)' to be correct, as insisted on by the Applicant, then the error within this table would be the value assigned to the 'maximum number of jacket foundations' and JNCC would suggest that this is corrected from 96 to 68 and should be made clear throughout all other documents. It is not clear how the Applicant has come to these values within the mentioned tables and it is not possible to replicate the maximum seabed area based on information provided in the tables. Where there is a combination of foundation types (e.g. Table 3.11), the maximum seabed calculation needs to account for both types. Table 3.11 details this with 64 wind turbines with a jacket foundation with pin piles combined with 32 turbines using suction bucket jackets or gravity-based foundations. As with Table

		(APP-050)) is correct. This value is the result of a maximum scour protection area of 10,012 m2 plus a maximum foundation area of 804 m2 multiplied by 68 wind turbines (the maximum number of wind turbines with suction-bucket jacket foundations associated with this foundation size option). The 'corrected total' of 1,038,336 m2 quoted by JNCC in REP1-066.146 for the suction-bucket jacket foundation type is incorrect as it multiples the scour protection area of 10,012 m2 plus a foundation area of 804 m2 by the maximum 96 wind turbines (not the correct maximum 68 turbines for this particular foundation size option). The scenario quoted by JNCC in this example is therefore not a viable project design option for the Mona Offshore Wind Project. The same reasoning applies for the other scenarios outlined by JNCC. The maximum footprints quoted for each of the foundation types presented in Volume 1, Chapter 3: Project description (APP-050) are correct and have therefore not been underestimated. As such, the maximum seabed areas for wind turbine and OSP foundations as stated in the DCO (i.e. 735,488 m2 for wind turbines and 24,964 m2 for OSPs) are also correct.	3.14, and the others already highlighted by JNCC, there is no avenue within the table to calculate the maximum seabed area of 284,360m^2. Assuming the foundation area of 85m^2 and scour protection per foundation area of 6,188m^2 are correct, the calculation should be (85+6,188)x64=401,472m^2 and does not account for the remaining 32 wind turbines of different foundation types. JNCC therefore does not agree with the Applicant's calculations. We would also refer to our previous response to the Applicant's comments on JNCC's RRs (RR-033.76).

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.147	135. An underestimation of the maximum footprint area will result in an underestimation of the total impact of the project on the benthic marine environment.	As noted in the response to REP1-066.146 above, the Applicant has explained that the maximum seabed footprints for wind turbine generators and OSPs has not been underestimated and is accurately represented in the maximum design scenario assessment in Table 2.18 of Volume 2, Chapter 2: Benthic, subtidal and intertidal ecology (APP-054).	Please see JNCC's response in row REP1-066.146 of this table.
REP1-066.148	Section 3.5.8.7, page 23 (APP-050) 136. Drill arisings from drilling of pin piles will create cuttings piles. A maximum seabed impact area should be calculated for these as cutting piles will impact the local environment and should be considered in more detail. Cuttings piles can be considered as temporary or permanent impacts depending on local conditions and drill arisings themselves. Dispersion modelling of the drill arisings will detail the extent of potential impact on the benthic environment and provide more detailed information on the quantity and extent of smothering impact.	The Mona Offshore Wind Project has adopted a maximum design scenario approach which allows the EIA process to be conducted on the basis on a realistic 'worst case' scenario (i.e. the maximum project design parameters) which is selected from different design and construction scenarios. Seabed preparation works prior to suction bucket jacket installation represents the maximum design scenario, with respect to spatial extent for temporary habitat loss accounting for 16,833,242 m2 of disturbance (as a result of 8,416,621 m3 of sediment deposited at a depth of 0.5 m). The temporary habitat loss associated with drill arisings resulting from jacket foundation installation is considered to fall within the area of disturbance described for seabed preparation for the suction bucket jacket foundations. Additionally paragraph 1.9.2.8 of Volume 2, Chapter 1: Physical Processes (APP-053) highlights that sedimentation beyond the immediate drilling location will be indiscernible. The Mona Offshore Wind Project has committed to depositing material arising from drilling in close proximity to the works (Table 2.19 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054)).	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.77), JNCC welcomes the clarification and agrees with this approach.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.149	Section 3.13.2.3, page 80 (APP-050) 137. Wording in relation to cable decommissioning was found to be inconsistent between documents. This section suggests cables “may be retrieved” at decommissioning while Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054) (Table 2.18, page 79) states all cables “will be removed” at decommissioning. JNCC assume all cables will be removed at decommissioning, but this needs to be clarified by the Applicant.	As outlined in section 3.13 of Volume 1, Chapter 3: Project description (APP-050), it is anticipated that all structures above the seabed or ground level will be completely removed where feasible and practical and this has been assessed as the maximum design scenario in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054). The project position is that cable and scour protection will preferably be left in situ and that all inter-array and interconnector cables may be retrieved. In addition to this, offshore export cables may be retrieved up to the exit pits (below MHWS) for cables installed under the intertidal area. The Applicant has not committed to the removal of cables in the decommissioning phase and the decision on whether to remove offshore cables will be taken at the time of decommissioning in consultation with the relevant stakeholders. The Applicant has, however, adopted a maximum design scenario approach and given that there is the possibility that all cables may be removed, as outlined in Volume 1, Chapter 3: Project description (APP-050), this has been assessed as the maximum design scenario for relevant impacts such as temporary habitat disturbance in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054). As outlined in section 3.13 of Volume 1, Chapter 3: Project description (APP-050), no offshore decommissioning works will take place until a written decommissioning programme has been approved by the Secretary of State for the Department for Energy Security and Net Zero (formerly the Department for BEIS). This will be submitted for approval prior to the commencement of the offshore works. The	As set out in the JNCC’s response to the Applicant's comments on JNCC’s RRs (RR-033.78), JNCC welcomes the Applicant’s response. However, we feel the wording remains inconsistent, and would welcome further clarification from the Applicant on this point.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
		scope of the decommissioning works would be determined by the relevant legislation and guidance at the time of decommissioning (i.e. including latest guidance on best practice for the decommissioning of cables).	
REP1-066.150	Section 3.13.2.4, page 80 (APP-050) 138. JNCC would expect all mattresses (concrete and frond) and rock bags used for cable protection to be removed at decommissioning. Not removing these will constitute a permanent habitat loss. The permanent introduction of hard substrates into a soft sediment environment would be a permanent habitat loss that leads to a regime shift of that habitat.	As outlined in section 3.13 of Volume 1, Chapter 3: Project description (APP-050), and in response to REP1-066.149, the project position is that cable protection will preferably be left in situ, but removal has been assessed where this represents the maximum design scenario for relevant impacts for benthic receptors (e.g. removal of hard substrates). Conversely, where leaving cable protection in situ represents the maximum design scenario this has been assessed for relevant impacts (e.g. long term habitat loss in the decommissioning phase where it is considered permanent habitat loss, section 2.9.5 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054)). The scope of the decommissioning works would be determined	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.79), JNCC welcomes the Applicant's response. However, this does not change our position as JNCC would expect all mattresses (concrete and frond) and rock bags used for cable protection to be removed at decommissioning.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
		by the relevant legislation and guidance at the time of decommissioning (i.e. including latest guidance on best practice for the decommissioning of cable protection).	
REP1-066.151	Section 3.13.2.5, page 81 (APP-050) 139. We would agree that the cable installation and removal impacts would have the same temporary impact. However, if cables were left in situ and required protection through rock dump (for example through cut ends or free spans), this would increase the permanent impact to the seabed and should be considered further. These impacts are part of the development, albeit during decommissioning. If the impacts are not considered prior to installation, then the final impact to the marine benthic environment will be significantly underestimated.	The installation of rock protection over cables and around foundations during the construction and operation and maintenance phases is fully considered and the assumptions are set out in each chapter's section on the maximum design scenario, e.g. see section 2.7.1 and Table 2.18 in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054). The initial assessment deemed that no cable free spans would be undertaken and is secured through the detailed cable specification and installation plan, incorporating a cable burial risk assessment, in adherence to the Applicant's commitments secured under Schedule 14, Condition 18(1)(d) of the Draft DCO (C1 Draft Development Consent Order F04). The project design assessed in the Environmental Statement does not include for additional cable protection to be installed at the point of decommissioning (e.g. for cut cable ends). The scope of the decommissioning works would be determined by the relevant legislation and guidance at the time of decommissioning (i.e. including latest guidance on best practice for the decommissioning of subsea cables).	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.80), JNCC welcomes the Applicant's response. However, this does not change our position as the final impact to the marine benthic environment will be significantly underestimated due to the Applicant not assessing the impact from decommissioning.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.152	Volume 2, Chapter 1: Physical processes (APP-053) Section 1.9.5.10, page 83 (APP-053) 140. We believe that the total Offshore Substation Platforms (OSP) footprint should be 20,180m2 and not 19,500m2 as detailed in comments above regarding the tables in Volume 1, Chapter 3: Project description (APP-050). Note, the calculations detailed here are based on our interpretation of the data within the ES, notwithstanding our comments above from Volume 1, Chapter 3: Project description (APP-050) on the numerous numerical errors throughout the ES. An underestimation of the maximum footprint area will result in an underestimation of the total impact of the project on the benthic marine environment.	As discussed in the Applicant's response to REP1-066.134 above, the Mona Offshore Wind Project has adopted a maximum design scenario approach and Volume 1, Chapter 3: Project description (APP-050) sets out the design assumptions and parameters for the Mona Offshore Wind Project from which the realistic maximum design scenarios are drawn for each topic specific chapter. This approach is detailed in section 5.3.4 of Volume 1, Chapter 5: Environmental Impact Assessment methodology (APP-052). As explained in Table 1.15 of Volume 2, Chapter 1: Physical processes (APP-053), the greatest overall in-water column blockage to influence tidal flow and wave climate from the OSPs has been assessed with a maximum design scenario of the maximum number of OSPs (four) with gravity base foundations. These parameters also present the largest overall footprints to affect changes in bathymetry and sediment transport pathways. However, the greatest single site influence in terms of OSP structures is the rectangular gravity base structure, which is larger than other foundation options. This was demonstrated in the modelling of this single foundation under sensitivity testing presented in Section 1.4.4 in Volume 6, Annex 1.1: Physical processes technical report (APP-86).	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.81), JNCC welcomes the Applicant's response. However, this does not change our position as it remains unclear to us why it is not appropriate to multiply maximum number of OSPs by the maximum seabed area per foundation.

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Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.153	Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054) Table 2.8, page 31 (APP-054) 141. We agree that Jack up vessel events on their own would be a temporary habitat loss/disturbance. However, jack up events regularly require extra stabilisation through rock dumping, particularly in softer seabed environments and/or within high dynamic environments. The extra rock dump required for jack up events has not been accounted for and should be considered a permanent impact and be included within the long term habitat loss/habitat alteration impact during construction, operation and maintenance, and also during decommissioning.	See the Applicant's response to REP1-066.149 for clarification on the maximum design scenarios assessed for decommissioning. Further to this, the Applicant can confirm that it does not anticipate a requirement for rock dumping to stabilise jack-up operations and this has therefore not been assessed within Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054). As outlined in section 3.13 of Volume 1, Chapter 3: Project description (Document Reference APP-050), no offshore decommissioning works will take place until a written decommissioning programme has been approved by the Secretary of State for the Department for Energy Security and Net Zero (formerly the Department for BEIS). Any deviation from the maximum design scenarios assessed in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054) would be considered and assessed as part of the decommissioning programme at the time of decommissioning taking into account latest guidance and best practice on decommissioning. The scope of the decommissioning works would be determined by the relevant legislation at the time of decommissioning.	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.82), JNCC welcomes the Applicant's confirmation that rock dumping would not be anticipated for jack-up events.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.154	142. Foundation removal does not address gravity-based structures for turbines or OSPs. If these are not possible to decommission (see comments above), they should be treated as a permanent habitat change.	As noted in the response to REP1-066.142 above, and as outlined in section 3.13 of Volume 1, Chapter 3: Project description (APP-050), it is anticipated that all structures above the seabed or ground level, including gravity based foundations, will be completely removed where feasible and practical and this has been assessed as the maximum design scenario in Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054) for all impact pathways. As outlined in section 3.13 of Volume 1, Chapter 3: Project description (APP-050), no offshore decommissioning works will take place until a written decommissioning programme has been approved by the Secretary of State for the Department for Energy Security and Net Zero. This will be submitted for approval prior to the commencement of the offshore works. The scope of the decommissioning works would be determined by the relevant legislation and guidance at the time of decommissioning (i.e. including latest guidance on best practice for the decommissioning of cables). Any deviation from the assessment presented in the Environmental Statement would be considered and assessed as part of the decommissioning programme at the time of decommissioning.	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.82), JNCC's concerns still remain around foundation removal of gravity-based structures for turbines or OSPs and the introduction of additional rock protection.
REP1-066.155	143. Introduction of additional rock protection has not been considered. For example, at cable cut ends if not fully removed, at cable free spans, jack up vessel stabilisation (as discussed above), cable crossings and protection, or scour protection.	See the Applicant's response to REP1-066.151 confirming that the project design assessed in the Environmental Statement does not include for additional cable protection to be installed at the point of decommissioning (e.g. for cut cable ends). In addition to this, and as outlined in the Applicant's response to REP1-066.153, the Applicant can	JNCC welcomes the Applicant's confirmation that additional rock protection will not be required for decommissioning or for jack up events.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
		confirm that it does not anticipate a requirement for rock dumping to stabilise jack-up operations.	
REP1-066.156	Table 2.18, page 84 (APP-054) 144. We welcome the suggested removal of all scour protection, cable protection, and crossing protection. However, the detail provided within this table contradicts details provided in Volume1, Chapter 3: Project description (APP-050), Section 3.13.2.4, page 80 (see previous comment relating to Table 2.8, page 31 of APP-050). Furthermore, if rock dump were to be used for protection, it is highly unlikely that the rock will be able to be removed and would therefore remain a permanent impact.	As outlined in section 3.13 of Volume 1, Chapter 3: Project description (APP-050) and the Applicant's response to REP1-066.149, the project position is that cable protection and scour protection will preferably be left in situ, but removal has been assessed where this represents the maximum design scenario for relevant impacts for benthic receptors (e.g. removal of hard substrates). Conversely, where leaving cable and scour protection in situ represents the maximum design scenario this has been assessed for relevant impacts (e.g. long term habitat loss). The scope of the decommissioning works would be determined by the relevant legislation and guidance at the time of decommissioning (i.e. including latest guidance on best practice for the decommissioning of cable protection).	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.83), JNCC welcomes the Applicant's response. However, this does not change our position as it is highly unlikely that the rock will be able to be removed and would therefore remain a permanent impact.
REP1-066.157	Table 2.18, page 85 (APP-054) 145. Changes in physical processes will occur at all three phases, not just the operation and maintenance phase. Decommissioning will affect physical processes, although at a much smaller scale, with the addition of rock dump and infrastructure that will be permanently left in situ.	As explained in section 1.9.4. of Volume 2, Chapter 1: Physical processes (APP-053), during the construction phase there will be gradual changes to physical processes as infrastructure is introduced into the environment. This would result in changes and therefore potential impacts ranging from the baseline environment (no presence of infrastructure) to the operational phase maximum design scenario, which are therefore fully assessed in the operation and maintenance phase assessment in section 2.9.9 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.84), JNCC welcomes the Applicant's response. However, this does not change our position as we do not believe that decommissioning has been fully accounted for with regards physical processes, unless all infrastructure is removed, and no remediation is required during the decommissioning process which would be unusual.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
		(APP-054). Changes to physical processes during the decommissioning phase is fully assessed in paragraph 2.9.9.60 et seq. of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054).	
REP1-066.158	Section 2.9.2.27, page 103 (APP-054) 146. We would not agree with a reduction in the sensitivity of the sea pens and burrowing megafauna communities from 'High' to 'Medium'. We acknowledge that sea pens have not been recorded within the site-specific surveys to date but sea pens do not have to be present to define this OSPAR Threatened and Declining habitat, as also acknowledged within this section. For this reasoning, it would not be appropriate to reduce the sensitivity to 'Medium' and it should remain as 'High'. This would also apply to all subsequent sections (e.g. Section 2.9.2.32).	As outlined in section 1.7.6 of Volume 6, Annex 2 1: Benthic subtidal and intertidal ecology technical report (APP-087) and in the response to REP1-066.140 above, the site-specific benthic surveys identified very few burrows at stations where soft sediment was dominant. In combination with an absence of seapens and the predominantly gravelly sediment, it was concluded that these areas only had a negligible resemblance to the 'seapens and burrowing megafauna communities' habitat. Therefore a precautionary approach was adopted for stations where burrows were observed at an average SACFOR of 'frequent', and these stations were, for the purposes of the assessment, assumed to represent the 'seapens and burrowing megafauna communities' habitat. The sensitivity allocated to the seapens and burrowing megafauna communities IEF was based on the high sensitivity allocated in the MarESA to the relevant impacts. This sensitivity rating is primarily driven by the fragile nature of seapens as an epifaunal species. As previously noted site specific surveys identified no seapens within the Mona Offshore Wind Project therefore the sensitivity associated with this habitat was reduced to medium. Therefore, the Applicant considers that the assessment of	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.85), JNCC do not agree with the Applicant's response and our initial response remains.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
		the ‘seapens and burrowing megafauna communities’ habitat is sufficiently precautionary in this regard. Furthermore, to have adopted the full MarESA sensitivities, without amending for the particular sensitivity of seapens, would have over-estimated the impact to the specific habitat present in the Mona Offshore Wind Project. The Applicant is confident that the impacts to the seapens and burrowing megafauna communities Important Ecological Features will be no greater than minor adverse significance and are therefore not significant in EIA terms.	
REP1-066.159	Section 2.9.2.51, page 110 (APP-054) 147. We agree that the seabed will recover after the removal of the jack-up vessel’s spud cans but only when no rock dump has been used for stabilisation or scour protection of the spud cans (see comment on Table 2.8 above).	The Applicant can confirm that it does not anticipate requirements for rock dumping to stabilise jack-up operations.	As set out in the JNCC’s response to the Applicant's comments on JNCC’s RRs (RR-033.86), JNCC welcomes the Applicant's confirmation that rock dumping would not be anticipated for jack-up events. However, no such operations and impacts have therefore been assessed for the project and included in the DCO requirements, i.e. so if it is found to be required a separate license would then be needed.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.160	Section 2.9.5.10, page 146 (APP-054) 148. JNCC do not agree with an assessment of a low magnitude of impact, considering over two million square meters (Section 2.9.5.7) of seabed will be permanently impacted/changed. Section 2.9.5.7 highlights the impact area and gives a percentage of that compared with the Mona benthic subtidal and intertidal ecology study area (0.17%). This is not helpful as those areas include large portions that will not be directly impacted by the operations. A more useful area comparison for calculating the impact percentage would be of the total direct and indirect (temporary) impact areas. Combining the Long-term habitat loss and Temporary habitat loss areas would provide a more meaningful impact percentage and subsequent meaningful magnitude.	The assessments of magnitude have been based on the total areas of habitat disturbance/loss (in m2/km2) and the Applicant considers that presenting the percentages of the study area affected is useful in providing wider context to the values of long term habitat loss. Furthermore, the Applicant does not consider it appropriate to sum the values predicted for long term habitat loss and temporary habitat disturbance as the nature of the impacts (e.g. duration and recovery) are very different. The maximum design scenario for long term habitat loss is considered to be consistent with the definition of a low magnitude of impact (i.e. some measurable change in attributes, quality or vulnerability, minor loss or, or alteration to, one (maybe more) key characteristics, features or elements (Adverse)).	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.87), JNCC welcomes the Applicant's response. However, this does not change our position as detailed in our response to the Examiners Questions (PD-013), question Q1.17.2, which JNCC submitted at Deadline 3.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.161	Section 2.9.5.22, page 150 (APP-054) 149. JNCC do not agree with the suggestion that the permanent presence of cable and scour protection should be considered as permanent habitat alteration rather than permanent habitat loss. The permanent introduction of hard substrates into a soft sediment environment would be a permanent habitat loss that leads to a regime shift of that habitat (i.e. a permanent habitat alteration). It should therefore be considered as permanent habitat loss. This should be taken into account when re-assessing the magnitude of impact (Section 2.9.5.23, page 151).	The assessment of the potential for cable and scour protection to remain in situ post-decommissioning has been assessed as permanent long term habitat loss/habitat alteration (paragraphs 2.9.5.22 to 2.9.5.32 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054)), so considers both the loss of the sedimentary environment and the localised change/alteration to a hard substrate. The assessment concludes the effect will be of minor adverse significance.	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.88), JNCC welcomes the Applicant's response. However, this does not change our position. We remain of the opinion that permanent presence of cable and scour protection should be considered as permanent habitat loss and not habitat alteration.
REP1-066.162	Section 2.9.6.6, page 153 (APP-054) 150. JNCC recognise that settlement and subsequent recruitment on clean artificial structures is very complex. It should not be expected that colonisation will consist entirely of already present flora and fauna. Opportunistic colonisation will occur from flora and fauna that would not normally be recorded in the area due to the clean artificial surfaces	The assessment of the effects associated with the introduction of artificial structures, presented in section 2.9.6 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054), has drawn upon the latest published studies and research papers. The assessment considers the complexities of this impact, addressing both the potential impacts of the introduction of infrastructure on biodiversity and also the potential for adverse effects on the wider soft sediment environment. The Applicant is confident that the effects associated with this impact pathway will be no	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.89), JNCC welcomes the Applicant's response. However, this does not change our position.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
	allowing for opportunistic settlement. This has the potential to alter subsequent settlement and recruitment that can lead to a different final community composition.	greater than minor adverse significance and are therefore not significant in EIA terms.	
REP1-066.163	151. Additionally, temporal variation will also determine the final community composition (e.g. studies have shown different community composition depending on the time of year when the artificial structure was introduced).	Please see the Applicant's response to REP1-066.162 above. The assessment of the effects associated with the introduction of artificial structures, presented in section 2.9.6 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054) has drawn on the latest research. The assessment discusses the communities which may colonise artificial structures and acknowledges that it is likely to differ from the current soft sediment environment. This will be true regardless of the time of year the infrastructure is installed.	As set out in the JNCC's response to the Applicant's comments on JNCC's RRs (RR-033.89), JNCC welcomes the Applicant's response. However, this does not change our position.
REP1-066.164	Benthic Ecology Conclusion 152. The Applicant has provided a substantial quantity of information relating to the possible impacts which the development may have on the marine benthic environment. JNCC do not believe that the Applicant has assessed all impacts fully, in particular with regard to total infrastructure footprints, ancillary works requiring additional rock dump, and decommissioning operations.	The Applicant notes this concluding response and has addressed the specific concerns expressed by JNCC in the above responses.	JNCC notes the Applicant's response.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.165	153. Decommissioning operations have not been fully considered. JNCC appreciate that decommissioning will occur after a number of decades, however, it is important to consider all the impacts associated with decommissioning prior to construction and installation to ensure that all installations will be capable of being fully removed from the marine environment. It should also be noted that impacts should be considered permanent where infrastructure cannot be removed. JNCC have concerns around gravity-based foundations in this regard with further concerns around the need for additional rock dump to account for cable free spans, cable cut ends, and scour protection. Additional rock dump needs to be fully considered.	The Applicant notes this concluding response from JNCC and has addressed each of the specific concerns raised by JNCC in their responses to REP1-066.142, REP1-066.143, REP1-066.144, REP1-066.149, REP1-066.150 and REP1-066.151.	JNCC notes the Applicant's response.
REP1-066.166	154. JNCC are concerned that the Applicant has reduced the sensitivity of the 'sea pen and burrowing megafauna community' Important Ecological Features (IEF), and an OSPAR Threatened and Declining habitat, from 'High' to 'Medium'. We also believe that the magnitude of	The Applicant notes this concluding response from JNCC and has addressed each of the specific concerns raised by JNCC in their responses to REP1-066.140 and REP1-066.158.	JNCC notes the Applicant's response.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
	impact has been assessed too low and the subsequent adverse significance has been under-represented.		
REP1-066.167	155. To allow JNCC to accurately assess all impacts to the benthic environment from a development that spans terrestrial, inshore, and offshore waters, the offshore elements (those extending out from the 12nm territorial limit) need to be distinguished from the inshore (within 12nm). This is currently not addressed fully and without this level of detail, JNCC will not be able to adequately assess all the impacts.	The Applicant notes this concluding response from JNCC and has addressed the specific concerns raised by JNCC in their responses to REP1-066.141 and REP1-066.145. The Applicant notes that JNCC did not raise this point in their s42 feedback on the PEIR.	JNCC notes the Applicant's response.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
REP1-066.167.4	Benthic Ecology JNCC do not believe that the Applicant has assessed all impacts fully, particularly with regard to total infrastructure footprints, ancillary works requiring additional rock dump, and decommissioning operations. In conjunction with the matters raised in our Relevant Representation, we have the following concerns: Decommissioning operations have not been fully considered. JNCC appreciate that decommissioning will occur after a number of decades, however, it is important to consider all the impacts associated with decommissioning prior to construction and installation to ensure that all installations will be capable of being fully removed from the marine environment. It should also be noted that impacts should be considered permanent where infrastructure cannot be removed. JNCC have concerns around gravity-based foundations in this regard with further concerns around the need for additional rock dump to account for cable free spans, cable cut ends, and scour protection. Additional rock	The Applicant notes JNCC's comment. Please see the Applicant's response in rows REP1-066.138 through to REP1-066.141.	JNCC notes the Applicant's response.

Reference	Written Submission Comment	Applicant's response	JNCC's comment
	dump needs to be fully considered. JNCC are concerned that the Applicant has reduced the sensitivity of the 'seapen and burrowing megafauna community' Important Ecological Features (IEF), and an OSPAR Threatened and Declining habitat, from 'High' to 'Medium'. We also believe that the magnitude of impact has been assessed as too low and the subsequent adverse significance has been under-represented. To allow JNCC to accurately assess all impacts to the benthic environment from a development that spans terrestrial, inshore, and offshore waters, the offshore elements (those extending out from the 12nm territorial limit) need to be distinguished from those inshore (within 12nm). This is currently not addressed fully and without this level of detail, JNCC will not be able to adequately assess all the impacts.		

Please contact me with any questions regarding the above comments.

Yours sincerely,

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