Date: 18 February 2025
Our ref: Case: 18251 Consultation: 480575
Your ref: EN010121

National Infrastructure Planning
The Planning Inspectorate
Temple Quay House
2 The Square
Bristol
BS1 6PN

Hornbeam House
Crewe Business
Park Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

BY EMAIL ONLY

Dear Robert Jackson,

Morecambe Offshore Windfarm Generation Assets

The following constitutes Natural England's formal statutory response for Examination Deadline 4.

1. Natural England's Deadline 4 Submissions

Natural England has reviewed the documents submitted by the Applicant at Deadlines 1 and 2. We are submitting the following detailed responses:

- Natural England's mid-Examination Principal Areas of Disagreement Summary Statement (PADSS).
- Appendix G2 Natural England's advice on the In Principle Monitoring Plan (IPMP) at Deadline 4
- Appendix B9 Natural England's advice on Offshore Ornithology at Deadline 4
- Appendix I Natural England's Response to Rule 17 ExQs Deadline 4

2. Detailed advice on red-throated diver compensation measures

Natural England has provided some commentary on the proposed compensation measures for red-throated diver in Appendix B9 of this submission. We will submit a detailed review of these measures in our Deadline 5 submissions.

3. Natural England's mid-Examination Principal Areas of Disagreement Summary Statement (PADSS)

This PADSS should be read in conjunction with the Appendices and the Risk and Issues Log included with this submission, which provide further detail on the areas of disagreement which require resolution. For ease of reference, we have added a RAG rating for each principal area.

NE Ref.	The principal issue in question	The brief concern held by Natural England at RR/WR	What needs to change, or be included, or amended so as to overcome the disagreement	Likelihood of resolution during Examination and mid-Examination update	RAG rating
	Development Consent Order (DCO) and deemed Marine Licence (dML)				
P1	During construction monitoring condition does not require a stop to work should noise significantly exceed the assessed level.	This is a key mitigation to protect noise sensitive mammal and fish species. Without it there is a risk that noise generated during construction will exceed assessed levels.	Update to the construction noise monitoring condition to follow standard requirements.	Resolved. Condition 15 has been updated appropriately.	
P2	Standard monitoring condition	There is no pre- or post-construction benthic, marine mammal or ornithological monitoring secured by conditions.	Monitoring conditions should be included.	Potential resolution. Updates to DCO and dML are yet to include these conditions.	
	Offshore Ornithology				
P3	The Cumulative Effects Assessment methodology is not sufficiently robust and therefore limited confidence can be placed on its conclusions.	Some historic projects have not been considered quantitatively for the cumulative and in-combination assessments. This introduces the risk that impacts assessed are incomplete. We also question the apportioning of the impacts assessed to specific SPAs and therefore the results of appropriate assessments for these sites.	A full quantitative assessment should be presented, following the method Natural England has previously supplied to the applicant. We also urge collaboration with other OWF projects in the Irish Sea so that the same data are being used to perform cumulative and in-combination	Potential resolution. The Applicant has taken forward SNCB advice on the CEA. Resolvable once this is updated in the relevant ES chapters and assessments.	

			assessments across the region.		
P4	Adverse effect on red-throated diver (RTD) at Liverpool Bay / Bae Lerpwl SPA	Due to displacement impacts on RTD we do not agree that an adverse effect on the integrity of Liverpool Bay SPA can be ruled out. The additional 18km^2 of habitat used by RTD over which displacement will occur is a concern in light of the objective to restore the distribution of the species in the site.	The most effective way to avoid this adverse effect would be a change to the red line boundary or commitment to an exclusion zone for structures such that no turbines are located within 10km of this area.	Potential resolution. The Applicant has ruled out removal of turbines from the 10km buffer. Minimising overlap with this buffer and/or commitment to appropriate compensation measures could resolve the issue.	
P5	Adverse effect on lesser black-backed gull at Morecambe Bay and Duddon Estuary SPA and Ribble and Alt Estuary SPA	Due to in-combination collision impacts, an adverse effect on the integrity of these sites cannot be ruled out. Both sites' populations of this species are below their target so avoiding any further deterioration is imperative.	Assessments should be updated to consider current population trajectories and refined apportioning of impacts. The scale of the proposed compensatory measures should be adjusted in line with the revised assessments, and landowner agreement evidenced.	Potential resolution. The Applicant has provided the appropriate updates in technical notes. Resolvable by inclusion in relevant ES chapters and assessments.	
	Marine Mammals				
P6	The Applicant has not made a commitment to use Noise Abatement Systems (NAS) during construction.	From January 2025 there is an expectation that all offshore piling activity in English waters demonstrates best endeavours to deliver noise reductions. We anticipate that	The Applicant should fully commit to using noise abatement as mitigation to reduce both injury and disturbance to	Potential resolution. If the Applicant agrees to fully commit to using NAS as a	

		the majority of piling will not be able to proceed without noise abatement in place.	marine mammal receptors during construction activities. This should be reflected in a DCO/dML condition that requires consideration of NAS in the Marine Mammal Mitigation Protocol.	mitigation measure this may be resolved during Examination.	
	Benthic Ecology and Physical Processes				
P7	Assessment of impacts to benthic habitats and physical processes is incomplete	Potential impacts from seabed preparation works not fully considered within the assessment.	The Applicant should provide an updated assessment of impacts on physical processes and benthic ecology that incorporates a realistic worst case scenario for these activities.	Potential resolution. Upon submission of further information on boulder clearance.	

For any queries relating to the content of this letter please contact me using the details provided below.

Yours sincerely,

Laurence Browning

Marine Senior Officer, Cumbria Team

E-mail: [redacted]@naturalengland.org.uk

Telephone: [redacted]

Annex 1: Natural England's Response to the Applicant's Documents Submitted at Deadline 4 Relevant to our Remit

PINS Document Reference	Document Name	Natural England's Response/Position Summary
Marine Mammals		
REP3-061	9.25.1 Marine Mammal Technical Note 1 (EIA) - Revision 02 (Volume 9) (Tracked)	Natural England has provided an update in our Risks and Issues log in relation to this document.
REP3-063	9.26.1 Marine Mammal Technical Note 2 (HRA) - Revision 02 (Volume 9) (Tracked)	Natural England has provided an update in our Risks and Issues log in relation to this document.
Offshore ornithology		
REP3-009	4.11.1 Habitats Regulations Assessment Without Prejudice Derogation Case - Revision 03 (Volume 4) (Tracked)	Natural England's response to this document is provided in Appendix B9 and updates to the Risk and Issues log.
REP3-064	9.37 Habitats Regulations Assessment Without Prejudice Derogation Case – Red-Throated Diver at Liverpool Bay / Bar Lerpwl SPA - Revision 01 (Volume 9)	Natural England's response to this document is provided in Appendix B9 and updates to the Risk and Issues log.
REP3-065	9.38 Outline Compensation Implementation and Monitoring Plan – Red-throated diver - Revision 01 (Volume 9)	Natural England's response to this document is provided in Appendix B9 and updates to the Risk and Issues log.
REP3-057	9.22.1 Offshore Ornithology Technical Note 1 (EIA) - Revision 02 (Volume 9) (Tracked)	Natural England's response to this document is provided in Appendix B9 and updates to the Risk and Issues log.
REP3-059	9.23.1 Offshore Ornithology Technical Note 2 (HRA) - Revision 02 (Volume 9) (Tracked)	Natural England's response to this document is provided in Appendix B9 and updates to the Risk and Issues log.
General		
REP3-046	6.4.1 In Principle Monitoring Plan - Revision 02 (Volume 6) (Tracked)	Natural England's response to this document is provided in Appendix G2 and updates to the Risk and Issues log.
PD-013	Rule 17 letter to Natural England and Marine Management Organisation	Natural England's response to this document is provided in Appendix I and updates to the Risk and Issues log.

Marine Geology, Oceanography and Physical Processes and Marine Sediment and Water Quality		
REP3-012	5.1.7 Environmental Statement Chapter 7 Marine Geology, Oceanography and Physical Processes - Revision 04 (Volume 5) (Tracked)	Natural England has provided an update in our Risks and Issues log in relation to this document.
Benthic Ecology		
REP3-015	5.1.9.1 Environmental Statement Chapter 9 Benthic Ecology - Revision 03 (Volume 5) (Tracked)	Natural England has provided an update in our Risks and Issues log in relation to this document.

THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Morecambe Offshore Wind Farm: Generation Assets

Appendix B9 to Natural England's Deadline 4 Submission

Natural England's comments on Offshore Ornithology

For:

The construction and operation of the Morecambe Generation Offshore Wind Farm located approximately 30 km off the Northwest English Coast in the Irish Sea.

Planning Inspectorate Reference EN010121

18 February 2025

1. Major/Complex comments: Red-throated diver

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

- [REP3_064] Habitats Regulations Assessment Without Prejudice Derogation Case – Red-Throated Diver at Liverpool Bay / Bar Lerpwl SPA
- [REP3_065] Outline Compensation Implementation and Monitoring Plan – Red-throated diver

1.1. Summary

Application of the Mitigation Hierarchy and Alternative Solutions

The Applicant has presented proposed compensation measures for red-throated diver, as a without-prejudice derogations case for potential impacts on Liverpool Bay SPA. However, at this stage, Natural England does not consider that the Applicant has fully explored less damaging alternative solutions that would reduce the impact on the site.

The Applicant has ruled out the possibility of accommodating a 10km buffer between the pre-2017 boundary of the SPA and the array footprint, however, we advise that, in line with the mitigation hierarchy any additional buffer distance that the Applicant can feasibly accommodate to reduce the impact without significantly compromising energy production should be considered as a relevant less damaging alternative solution. Although we consider a 10km buffer to be the only way to rule out any potential impact on the site altogether, it is possible that an alternative design could reduce the impact to a level that does not result in an Adverse Effect on Integrity (AEoI) due to the Project alone, and where the contribution would not be considered sufficient to result in an in-combination adverse effect.

Further, we highlight that the red-line boundary encloses an area of 87km^2, whereas the Area for Lease is 125km^2 in size. The Applicant states that the reduction in the western area was following stakeholder feedback from other industries. However, it is unclear whether in doing so, the Applicant has inadvertently excluded potential turbine positions that could be achieved without impacting those industries. If this is the case, utilising these might in turn allow a greater buffer distance between the project and the SPA to be achieved. Again, this could constitute a less damaging alternative solution.

Compensatory Measures

The Applicant's proposal is focussed on providing nesting rafts on small lochs in Scotland to improve productivity, along with potential habitat management. We consider that in broad terms the measure is well evidenced and can reasonably be expected to deliver benefits for this species and, subject to the locations being selected, the National Site Network (NSN) for red-throated divers.

Nesting rafts and habitat management are technically feasible, however, site selection is a critical factor to the success of this measure. We welcome that the Applicant has progressed a shortlisting process and has secured initial letters of support from some landowners – although it is not clear from the report whether the waterbodies for which support has been secured are the most appropriate for the proposed measures. Whilst we acknowledge that this is an ongoing process, we consider that further information on the selected locations and the rationale for these is much needed. This should include, among other elements, any risk of unintended consequences (e.g. drawing divers out of SPAs into areas where they are not protected) and predation risk, particularly regarding American mink in mainland locations.

There is an acknowledged mismatch between the expected benefits (increased productivity) and the impact (habitat loss/degradation in a wintering area), which makes it difficult to consider what is an appropriate scale for the measure. The Applicant has proposed

installation of 20 nesting rafts, with a prediction that this will lead to five to seven additional juvenile birds fledging each year. We highlight that, based on the available evidence concerning survival rates for this species, approximately two of those birds may be expected to reach maturity and recruit into the breeding population annually. We are broadly content that the scale of measures proposed is appropriate for the Project's impacts, subject to suitable locations being identified and secured.

The Applicant has submitted a brief outline structure for the compensation implementation and monitoring plan. Whilst the structure is appropriate, we are concerned that it contains no detailed content. The plan should be populated as far as is possible before the close of the Examination. As it is only an outline at this stage, we will provide comment on this when it has been developed further.

2. Major/Complex comments: Lesser black-backed gull

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

- [REP3_009] 4.11.1 Habitats Regulations Assessment Without Prejudice Derogation Case

2.1. Summary

The Applicant has updated the without prejudice derogation case document for lesser black-backed gull with revised impact figures based on the Offshore Ornithology Technical Note 2 (HRA), submitted at Deadline 1. We welcome the updated figures but highlight that it is our position that for Morecambe Bay and Duddon Estuary SPA they are likely to be an underestimate of the true impact that could be expected by the time the Project is operational, due to the status of the colony at the time of baseline characterisation surveys compared to its current positive population and productivity trends, and therefore potential future trajectory.

The Applicant has not managed to replicate the Hornsea 3 method advised for calculating compensation requirements. More generally, identifying a robust and proportionate approach to quantifying the compensation requirements for offshore windfarms impacting seabird SPAs has proved challenging. On behalf of Collaboration on Offshore Wind Strategic Compensation (COWSC), Natural England has commissioned the British Trust for Ornithology (BTO) to carry out an independent review both existing and alternative approaches to compensation calculations, principally for black-legged kittiwake. We will endeavour to keep the Examining Authority and The Applicant updated on timescales for delivery of this project and whether it has any implications for the Applicant's compensation proposals.

The Applicant has updated the in-principle monitoring plan to suggest that monitoring to inform understanding of collision risk is not required. We disagree with this, and highlight that, as outlined above, there is uncertainty over the true level of the Project's collision impacts on key protected species that should be addressed through monitoring efforts, and we encourage the Applicant to consider possible methods to address this. See Appendix G2.

Table 1: Natural England's Advice On: Habitats Regulations Assessment Without Prejudice Derogation Case – Red-Throated Diver at Liverpool Bay / Bar Lerpwl SPA

Document reviewed: [REP3-064] 9.37 Habitats Regulations Assessment Without Prejudice Derogation Case – Red-Throated Diver at Liverpool Bay / Bar Lerpwl SPA			
NE Ref	**Section**	**Key Concern and/or Update**	**Natural England's Advice to Resolve Issue**
1	4.4.3, 4.4.4	When considering an alternative scale or alternative design for the Project as a potential way to avoid the impact on Liverpool Bay SPA, the Applicant notes our previous advice that to avoid the impact on red-throated diver distribution they would need to ensure that no turbines are built within 10km of the original SPA boundary and has ruled this out as an alternative solution. We do not consider that this represents a full exploration of the potential to reduce the impact on the SPA through an alternative array design.	We highlight that according to the mitigation hierarchy and in line with the alternative solutions test, if avoiding the impact is not possible, every effort should still be made to mitigate the impact as far as possible, which in this case would involve ensuring that turbines are built as far away from the original SPA boundary as is feasible while maintaining the viability of the Project. We advise that if an alternative design which increases the buffer distance between the turbine array and the pre-2017 SPA boundary is feasible without significantly reducing energy generation, it would constitute an alternative solution and should be presented as a potential mitigation measure to reduce the Project's impact on the SPA. Although we consider a 10km buffer to be the only way to rule out any potential impact on the site altogether, it is possible that an alternative design could reduce the impact to a level that does not result in Adverse Effect on Integrity (AEOI) due to the Project alone and where the contribution would not be considered sufficient to result in an in-combination adverse effect.
2	Appendix 1, Table 2.1	Natural England broadly agrees with the conclusions of the screening process for potential compensation measures. Regarding reducing disturbance from existing anthropogenic activity (vessels and helicopters), we do note that in the technical note 3 submitted at Deadline 1, the Applicant provided analysis to suggest that the red-throated diver feature of Liverpool Bay SPA is currently impacted by disturbance from high levels of traffic in the area,	We consider that the provision of nesting rafts and/or habitat management to improve the breeding success of red-throated diver could be an effective measure to compensate for the Project's impacts on the non-breeding red-throated diver feature of the Liverpool Bay SPA, while noting the mismatch between the nature and location of the impact and the proposed measure. With that in mind, we do consider a strategic contribution might be more appropriate.

		particularly helicopter traffic. We therefore consider that there could be potential ecological benefit in reducing disturbance from this source, particularly given the precedent set by EA1N and EA2 OWF projects. However, we acknowledge that the difficulties in securing this measure may mean that it is not feasible for the Project to deliver, and that the Applicant has screened in 'Contributed to a strategic fund', which is the most likely delivery route for reducing disturbance/displacement effects.	
3	Appendix 1, Table 2.1	We welcome the Applicant's consideration of strategic compensation as an alternative measure. We consider that this would be a desirable solution if deliverable within the timescale of the Project.	We support the principle of the Applicant making a contribution to a strategic fund, noting that as the Library of Strategic Compensation Measures (LoSCM) expands, measures relevant to red-throated diver may become available in due course. We recommend that the Applicant monitors the progress of the COWSC (Collaboration on Offshore Wind Strategic Compensation) initiative as regards suitable options, and if measures are emerging, consider what an appropriate contribution might entail.

4		Given the focus to deliver benefit to the wider NSN we question whether it may be advantageous to seek to collaborate on delivery of sites with North Falls, rather than seeking to avoid overlap with their proposals. We understand that the areas in which the Applicant would seek to deliver the proposed compensation were screened out by North Falls due to having lower potential for delivery of the measure. The greatest benefit to the NSN may therefore come from scaling up measures in the regions screened in by North Falls rather than seeking other, potentially less desirable sites. We acknowledge, however, that the Applicant has already carried out shortlisting of potential sites and secured letters of support from some landowners, and we welcome this progress.	We advise that the Applicant considers whether the proposed nest rafts and habitat management compensation measure could be more effectively delivered through collaboration with North Falls.
5	Appendix 1, 2.3.1	We recognise that given the uncertain breeding origins of the birds present in Liverpool Bay, there would not necessarily be any direct benefit to the impacted population from the proposed measure of providing nesting rafts and/or habitat management. Furthermore, the measure would not address the disturbance and displacement (effectively felt as habitat loss) impacts of the project. Nevertheless, there would be connectivity with the United Kingdom National Site Network (UK NSN) through potential recruitment into Scottish SPAs designated for breeding RTD, and possibly also to the	We would welcome further consideration from the Applicant regarding how benefits to the UK NSN might be best delivered.

		Scottish and English SPAs designated for non-breeding red-throated divers. We highlight that it is not clear that direct connectivity with the impacted site would necessarily be advantageous in this case, as delivering additional birds into a site adversely affected by disturbance impacts may be less beneficial to the UK NSN as a whole than if they were to winter in a less impacted site.	
6	Appendix 1, 3.1.3, 3.1.4	The Applicant has provided adequate evidence that the breeding success of red-throated divers is constrained and that the provision of nesting rafts and/or habitat management are feasible and have the potential to measurably improve productivity at sites where the measures are implemented. Nesting rafts have been shown to increase productivity at suitable sites and has a long history of successful implementation, proving it is technically feasible. Habitat management is feasible should baseline monitoring identify there is a need at suitable sites. We highlight that regulation of water levels (on peat) may prove much more challenging than reducing predation/anthropogenic disturbance or managing the height of vegetation.	For information.
7	Appendix 1, 3.1.2.5	Although in most regards the Applicant's proposed measure is similar to that of North Falls, we advise that the different proposed location of the measures introduces some alternative considerations. The Applicant has noted the possibility of American mink predation. American mink are present across large areas of mainland Scotland and some of the islands but are absent from Shetland. The Applicant will need to carefully consider whether the presence of American mink in some areas may significantly compromise the	We advise that local stakeholders, including NatureScot, are consulted regarding sites where mink predation may be an issue and that this informs site selection and/or potential adaptive management solutions.

		measure, and if there is a residual risk in some locations, give consideration to potential adaptive management solutions if mink predation proves to be a threat to the success of the measure.	
8	Appendix 1, 4.2	Natural England is satisfied that suitably evidence-based criteria for identification of potential compensation sites have been set out by the Applicant. We welcome the use of local experts in the site identification process.	No further action needed.
9	Appendix 1, 4.3	Natural England agrees with the Applicant that there is no robust way to scale the level of compensation to be delivered due to the mismatch between the expected benefits (increased productivity) and the impact (habitat loss/degradation). We note that Applicant's prediction that the provision of 20 nesting rafts could lead to an additional five to seven birds being fledged each year. However, we would highlight that the success of a compensation measure is generally considered in terms of the number of breeding adults the measure may introduce into the population, rather than fledged juveniles. Survival rates of RTD are not well evidenced but are thought to be relatively low. Horswill & Robinson (2015) report (with low confidence) survival rates of 0.6 for juveniles (age 0-1) and 0.62 for immatures (age 1-2). This suggests that the measure might be expected to deliver approximately 2 additional adult red-throated divers per year into the population. Nonetheless, we are broadly content that the scale of the measures proposed is appropriate for the Project, subject to suitable locations being identified..	We would welcome further exploration of the benefits to the breeding population from the provision of an additional two adult divers per year.
10	Appendix 1, 4.5	We welcome that the compensation would be implemented and maintained for the lifetime of the Project, and that the Applicant has indicated that	The implementation plan should set out how the need for adaptive management will be identified and the sorts of

		adaptive management would be implemented if the measure was found not to be delivering against its objectives.	measures that might be required. We look forward to reviewing a populated version of the implementation plan in due course.
11	Appendix 1, 4.7	We acknowledge the inherent risks that multiple monitoring visits might represent and recognise that anthropogenic disturbance has been reported as a factor in reduced breeding success, though Nummi and others (2013) found that red-throated diver bred successfully on nesting rafts despite anthropogenic disturbance. Nevertheless, we would advocate investigation into the feasibility of using established or emerging technologies for this purpose, such as thermal drones, trail cameras/temperature data loggers (Hulka, 2010) or remote camera systems to ensure that the potential improvements to red-throated diver productivity by adopting nesting rafts are adequately quantified in comparison with natural sites and/or a baseline. We note that where site visits are required, these would be conducted by appropriately licensed individuals. Success of the measures relies heavily on the Applicant's ability to quantify existing productivity as this measure relies on improvements to existing productivity, hence effective monitoring is an essential part of the compensation package.	The implementation plan should set out an in-principle monitoring methodology that can then be fully detailed during steering group discussions.
12	Appendix 1, 4.7.3	We note discussion of the need for retrofitting roofs to nesting rafts should avian predation be identified as a limiting factor in breeding success. We understand that the deployment of camouflage nets over wire mesh has met with some success elsewhere for great northern diver (DeSorbo and others, 2008) but consider that references to 'roofs' are somewhat misleading. Rafts will need to be placed in sheltered locations to avoid a retrofitted structure acting as a sail in high winds. We would encourage raft design to allow for the	The implementation plan should in due course clarify what this adaptive management would entail.

		development of natural vegetation (e.g. *Carex spp.* at <30cm).	
13	Appendix 1, Table 5.1	We note the Applicant's assessment of the potential effects of the proposed compensation measures. We advise that, as the proposed measure involves installing nesting rafts near SPAs designated for breeding divers, there may be some potential for the rafts to attract divers that would otherwise breed within an SPA. Even if those birds did show improved breeding success, this would nonetheless be an undesirable outcome for the NSN as fewer birds would be breeding within protected sites.	It is not clear what distance from breeding RTD SPAs the Applicant has used to prevent the risk of unintended consequences, such as attracting divers out of protected locations. This should be clarified and an evidence-based rationale provided. We advise that the relevant SNCB (NatureScot) should be consulted regarding potential impacts on Scottish protected sites.

Table 2: Natural England's Detailed Advice On: Lesser black-backed gull Habitats Regulations Assessment Without Prejudice Derogation Case

Document reviewed: [REP3_009] 4.11.1 Habitats Regulations Assessment Without Prejudice Derogation Case			
NE Ref	**Section**	**Key Concern and/or Update**	**Natural England's Advice to Resolve Issue**
14	4.3.2.3	Natural England notes that the Applicant has updated this document with the impact figures for lesser-black backed gull at Morecambe Bay and Duddon Estuary SPA from the Offshore Ornithology Technical Note 2 (HRA). We welcome this as being more representative of the predicted impacts as based on the baseline survey data.	We highlight, as per our comments at Deadline 3 [3REP3_090], that based on the ecology of this species and the trajectory of the SPA population, the Applicant's impact figures are likely to be an underestimate of the impacts expected by the time the Project is operational. This should be taken into account when calculating compensation requirements and monitoring plans.
15	4.3.3.3	We note that the Applicant has updated this document with the impact figures for lesser-black backed gull at Ribble and Alt Estuaries SPA from the Offshore Ornithology Technical Note 2 (HRA). We welcome this as being more representative of the predicted impacts as based on the baseline survey data.	No further action needed.

16	Annex 2A: Site Selection for Compensatory Measures for Lesser Black-Backed Gull, Section 2.4	We note that the Applicant has been unable to replicate the Hornsea 3 method for calculating compensation requirements. Identifying a robust and proportionate approach to quantifying the compensation requirements for offshore windfarms impacting seabird SPAs has proved challenging. Multiple methods have been used but there is no clear consensus on the most appropriate method to use. On behalf of Collaboration on Offshore Wind Strategic Compensation (COWSC), Natural England has commissioned the British Trust for Ornithology (BTO) to carry out an independent review both existing and alternative approaches to compensation calculations, to help resolve the issue and establish a level playing field for projects. If possible, the BTO will provide recommendations to COWSC regarding the most appropriate method to use for black-legged kittiwake. The BTO review will also consider whether the recommendations are relevant to other seabird species. A final report to COWSC is scheduled for March 2025. Natural England will endeavour to keep current Examinations and prospective applicants updated on timescales.	Natural England will endeavour to keep the Examining Authority and The Applicant updated on timescales for delivery of this project and whether it has any implications for the Applicant's compensation proposals.
17	Annex 2B: Evidence Plan and Roadmap for Lesser Black-Backed Gull, Section 6.1	We welcome that the Applicant has incorporated consideration of the potential impacts of the compensation measure into this document and we are satisfied with the conclusions.	No further action needed.

3. Minor comments

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

- [REP3_057] 9.22.1 Offshore Ornithology Technical Note 1_EIA_Rev 02
- [REP3_059] 9.23.1 Offshore Ornithology Technical Note 2_HRA_Rev 02

Table 3: Natural England's advice on: Offshore ornithology technical notes

Document reviewed	Update made	Issue resolved?
[REP3_057] 9.22.1 Offshore Ornithology Technical Note 1 (EIA)	We note the updated displacement assessment figures for Manx Shearwater and are satisfied that the assessment conclusions are unchanged.	Yes
[REP3_057] 9.22.1 Offshore Ornithology Technical Note 1 (EIA) section 5.1	NRW is the SNCB for comment on the updated quantitative assessment of effects on Pen y Gogarth / Great Orme's Head Site of Special Scientific Interest (SSSI), as this is a Welsh site.	n/a
[REP3_059] 9.23.1 Offshore Ornithology Technical Note 2 (HRA)	We note that all the updates within this document pertain to Welsh sites, and NRW is therefore the SNCB for comment.	n/a

3. References

DeSorbo, C. R., Fair, J., Taylor, K., Hanson, W., Evers, D.C., Vogel, H. S. and Cooley, J. H., (2008). Guidelines for constructing and deploying common loon nesting rafts. *Northeastern Naturalist,* 15(1); 75-86.

Horswill, C. and Robinson, R.A., 2015. Review of Seabird Demographic Rates and Density Dependence. JNCC Report no. 552.

Hulka, S., 2010. Red-throated Diver breeding ecology and nest survival on Shetland. University of Glasgow (United Kingdom). PhD Thesis.

Nummi, P., Väänänen, V. M., Pakarinen, R. and Pienmunne, E., 2013. The Red-throated Diver (Gavia stellata) in human-disturbed habitats–building up a local population with the aid of artificial rafts. *Ornis Fennica*, 90(1); 16-22.

THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

MORECAMBE GENERATION OFFSHORE WIND FARM

Appendix G2 to Natural England's Deadline 4 Submission

Natural England's comments on the Offshore in Principle Monitoring Plan Rev 02 [REP3-046]

For:

The construction and operation of Morecambe Generation Offshore Wind Farm, located approximately 30 km from the Northwest English Coast in the Irish Sea.

Planning Inspectorate Reference EN010121

18 February 2025

1. Major/Complex comments

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

- [REP3-046] 6.4 Offshore In Principle Monitoring Plan

1.1. Summary

- The Applicant has committed to addressing NE's concerns raised at Deadline 2 [REP2_037], but it remains unclear how this will be done.
- NE advises that monitoring for disturbance impacts to marine mammals is required.
- NE advises that monitoring for collision impacts to birds should be considered.
- Pre-construction monitoring has not been proposed for several receptors. NE advises that this is likely to be required in order for the monitoring to adequately detect change.

1.2. Overarching comments

The Applicant has included the hypotheses that they will be testing for proposed monitoring, but it is still not clear how the data collected will be used to test these hypotheses, whether proposed methods will have sufficient statistical power to detect change, or how these results could be used to inform the adaptive monitoring approach. We recommend that development of the IPMP continues with regard to the principles outlined in our previous submission [REP2_037].

Table 1: Natural England's Detailed Advice On: General Guiding Principles for the Proposed Monitoring

Document reviewed: [APP-148] 6.4 Offshore In Principle Monitoring Plan			
NE Ref	**Section**	**Key Concern and/or Update**	**Natural England's Advice to Resolve Issue**
1	2.1	NE welcomes the addition of information on decommissioning and post-decommissioning studies to the IPMP. We note however that none of the proposals are specific to monitoring the effects of decommissioning on environmental receptors. We also note the Applicant intends to delay the submission of further detail on decommissioning monitoring to the pre-construction period with the Decommissioning Programme, and any commitment to such monitoring to the post-construction period.	NE's advice remains that an outline Decommissioning Programme should be submitted to support the consenting phase. This should include an outline of monitoring that could be carried out for environmental receptors (most importantly, offshore ornithology, marine mammals and benthic) during and post-decommissioning, should it be required.
2	2.5.3 and Table 2.3	Updates to these sections have clarified that noise monitoring and monitoring to provide distribution information on harbour porpoise and other marine mammals is now considered to be required by the Applicant. We note that the distribution monitoring will only apply to the over winter period as this proposal is tied to the monitoring for red-throated diver. However, monitoring of disturbance to marine mammals is only included as an option, if deemed necessary by SNCBs.	NE advises that monitoring of marine mammal responses to impacts is necessary and should be undertaken.
3	Table 2.4	Natural England notes that the Applicant has stated that they consider that additional monitoring of collision impacts would not be required. As Natural England considers that the predicted impacts of the Project on the lesser black-backed gull feature of Morecambe Bay and Duddon Estuary presented by the Applicant are likely to be an underestimate of the potential impacts that could be	As set out in our comments at Deadline 3 [REP3_090], the Project's baseline surveys coincided with years when the colony was just beginning to recover following years of repeated breeding failure, when numbers of breeding adults and productivity levels were still relatively low. Colony numbers and productivity have already increased since then, meaning that more birds are already likely to forage offshore during the breeding season, potentially

		expected to occur by the time the Project is operational, there could be value in using monitoring to determine whether this is the case.	within the Project footprint, than were recorded in the baseline surveys. As it is unknown by what amount the predicted figures may underestimate the true impact, this represents a key uncertainty which monitoring could address. We advise the Applicant to consider methods to address this uncertainty, to confirm whether it is the case that more gulls may be found on the site during the breeding season at the time of construction/operation and whether the predicted collision impacts are accurate.
4	Table 2.4	Only post-construction monitoring is considered to be required for red-throated diver by the Applicant.	It is unlikely that any changes in abundance and distribution could be determined without both pre and post construction monitoring. NE therefore advises that pre-construction monitoring is also included as required, based on an assessment of the power of the data to detect change. We also note that pre-construction monitoring for red-throated diver presents the opportunity to gather pre-construction evidence on harbour porpoise according to the Applicant's proposal to combine these surveys. This will provide improvements to the ability to detect change for harbour porpoise in the over-winter period in addition to gathering basic information on distribution at a single point in time.