



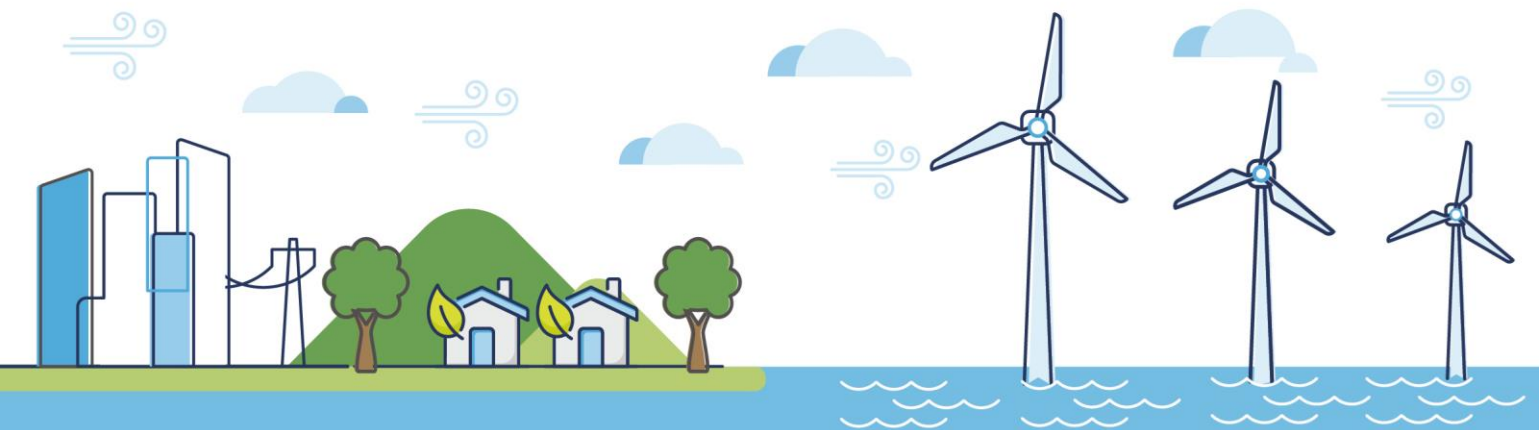
# **Morecambe Offshore Windfarm: Generation Assets Examination Documents**

## **Volume 9**

### **The Applicant's Comments on Natural England's Risk and Actions Log at Deadline 4**

Document Reference: 9.58

Rev 01



## Document History

<b>Doc No</b>	MOR001-FLO-CON-ENV-NOT-0032	<b>Rev</b>	01
<b>Alt Doc No</b>	PC1165-RHD-EX-XX-RP-Z-0015		
<b>Document Status</b>	Approved for Use	<b>Doc Date</b>	11 March 2025
<b>PINS Doc Ref</b>	9.58	<b>APFP Ref</b>	n/a

Rev	Date	Doc Status	Originator	Reviewer	Approver	Modifications
01	11 March 2025	Approved for Use	Royal HaskoningDHV	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a

## Contents

1	Introduction .....	8
2	Comments on NE's Risk and Actions Log.....	8
2.1	Summary: Principal Areas of Disagreement.....	11
2.2	DCO .....	14
2.3	Offshore Ornithology .....	18
2.3.1	Ornithology Compensation .....	34
2.4	Fish and Shellfish Ecology .....	52
2.5	Marine Mammals.....	54
2.6	Marine Geology, Marine Sediment and Water Quality .....	84
2.7	Benthic Ecology.....	89
2.8	Bats .....	93
3	References.....	94

## Tables

Table 2.2 The Applicant's comments on NE's Risk and Actions Log: Principal Areas of Disagreement.....	11
Table 2.3 The Applicant's comments on NE's Risk and Actions Log: DCO .....	14
Table 2.4 The Applicant's comments on NE's Risk and Actions Log: Offshore Ornithology.....	18
Table 2.5 The Applicant's comments on NE's Risk and Actions Log: Ornithology Compensation .....	34
Table 2.6 The Applicant's comments on NE's Risk and Actions Log: Fish and Shellfish Ecology .....	52
Table 2.7 The Applicant's comments on NE's Risk and Actions Log: Marine mammals .....	54
Table 2.8 The Applicant's comments on NE's Risk and Actions Log: Marine Geology, Marine Sediment and Water Quality.....	84
Table 2.9 The Applicant's comments on NE's Risk and Actions Log: Benthic Ecology .....	89
Table 2.10 The Applicant's comments on NE's Risk and Actions Log: Bats .....	93

## Glossary of Acronyms

CEA	Cumulative Effects Assessment
CMS	Construction Method Statement
DCO	Development Consent Order
dML	deemed Marine Licence
ExA	Examining Authority
HRA	Habitats Regulations Assessment
IP	Interested Parties
IPMP	In Principle Monitoring Plan
JNCC	Joint Nature Conservation Committee
MCZ	Marine Conservation Zone
MMMP	Marine Mammal Mitigation Protocol
NAS	Noise Abatement
NE	Natural England
PEMP	Project Environmental Management Plan
PTS	Permanent Threshold Shift
RIAA	Report to Inform Appropriate Assessment
SAC	Special Area of Conservation
SNCB	Statutory Nature Conservation Bodies
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UK	United Kingdom
UWSMS	Underwater Sounds Management Strategy
VTMP	Vessel Traffic Management Plan

## Glossary of Terminology

Applicant	Morecambe Offshore Windfarm Ltd
Agreement for Lease (AfL)	Agreements under which seabed rights are awarded following the completion of The Crown Estate tender process.
Generation Assets (the Project)	Generation assets associated with the Morecambe Offshore Windfarm. This is infrastructure in connection with electricity production, namely the fixed foundation wind turbine generators (WTGs), inter-array cables, offshore substation platform(s) (OSP(s)) and possible platform link cables to connect OSP(s).
Inter-array cables	Cables which link the WTGs to each other and the OSP(s).
Morgan and Morecambe Offshore Wind Farms: Transmission Assets	The Transmission Assets for the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm. Also referred to in this report as the Transmission Assets, for ease of reading.
Offshore substation platform(s)	A fixed structure located within the windfarm site, containing electrical equipment to aggregate the power from the WTGs and convert it into a more suitable form for export to shore.
Platform link cable	An electrical cable which links one or more OSP(s).
Windfarm site	The area within which the WTGs, inter-array cables, OSP(s) and platform link cables will be present.



# The future of renewable energy

A leading developer in Offshore Wind Projects

# 1 Introduction

1. This document presents Morecambe Offshore Windfarm Ltd (the Applicant) comments on Natural England's (NE) Risk and Action Log, submitted at Deadline 4 (REP4-067).
2. This document provides an update to The Applicant's Comments on Written Representations Appendix A: Applicant's Comments on Natural England Risk and Actions Log (REP2-028) submitted at Deadline 2 and seeks to clarify which matters are considered 'resolved' and which matters are still outstanding with NE.
3. Each tab of NEs Risk and Actions Log is replicated in sections below:
  - **Section 2.1:** Principal Areas of Disagreement
  - **Section 2.2:** Draft Development Consent Order (DCO)
  - **Section 2.3:** Offshore Ornithology
    - **Section 2.3.1:** Ornithology Compensation
  - **Section 2.4:** Fish and Shellfish Ecology
  - **Section 2.5:** Marine Mammals
  - **Section 2.6:** Marine Geology, Marine Sediment and Water Quality
  - **Section 2.7:** Benthic
  - **Section 2.8:** Bats
4. As the owner of the Morecambe Offshore Windfarm Generation Assets, Morecambe Offshore Windfarm Ltd is the named undertaker that has the benefit of the Development Consent Order (DCO). References in this document to obligations on, or commitments by, 'the Applicant' are given on behalf of Morecambe Offshore Windfarm Ltd as the undertaker of Morecambe Offshore Windfarm Generation Assets.

# 2 Comments on NE's Risk and Actions Log

5. The Applicant's comments on NE Risk and Actions Log (REP4-067) are presented in **Table 2.1**. Please note that NE's colour coding is as follows:



*Table 2.1 NE's Risks and Action Log colour coding*

Description	Colour
<p><b>Purple</b> Note for Examiners and/or competent authority. May relate to DCO/Deemed Marine Licence (dML)</p>	
<p><b>Red</b> NE considers that unless these issues are resolved it will have to advise that (in relation to any one of them, and as appropriate) it is not possible to ascertain beyond reasonable scientific doubt that the project will not affect the integrity of an Special Area of Conservation (SAC)/ Special Protection Area (SPA)/Ramsar and/or significantly hinder the conservation objectives of an Marine Conservation Zone (MCZ) and/or damage or destroy the interest features of a Sites of Special Scientific Interest (SSSI) and/or comply fully with the Environmental Impact Assessment requirements.</p> <p>Addressing these concerns <u>may</u> require the following:</p> <ul style="list-style-type: none"> <li>▪ new baseline or survey data; and/or</li> <li>▪ significant revisions to baseline characterisation and/or impact modelling and/or</li> <li>▪ significant design changes; and/or</li> <li>▪ significant mitigation</li> </ul> <p>In addition, NE may use this category to highlight where there is a significant risk that an issue will not be sufficiently addressed within the Examination timescales. Consequently, issues that start out as Amber may progress to Red in the latter stages of the examination.</p>	
<p><b>Amber</b> NE does not agree with the applicant's position or approach and consider that this could make a material difference to the outcome of the decision-making process for this project.</p> <p>NE considers that these matters <u>may</u> be resolved through:</p> <ul style="list-style-type: none"> <li>▪ provision of additional evidence or justification to support conclusions; and/or</li> <li>▪ revisions to impact assessment methodology and/or assessment conclusions; and/or</li> <li>▪ minor to moderate revisions to impact modelling; and/or</li> <li>▪ well-designed mitigation measures that are adequately secured through the draft DCO/dML and/or</li> <li>▪ amendments to draft plans</li> </ul> <p>If these issues are not addressed or are unlikely to be resolved by the end of the Examination, then they may become a Red risk as set out above.</p>	
<p><b>Yellow</b> NE doesn't agree with the Applicant's position or approach. We would ideally have liked this to be addressed prior to the examination but are satisfied that for <u>this particular project</u> it is unlikely to make a material difference to our advice or the outcome of the decision-making process and would not expect these matters to be a ongoing focus of the examination. However, we reserve the right to revise our opinion should further evidence be presented.</p> <p>It should be noted by interested parties (IP) that just because these issues/comments are not raised as significant concerns in this instance, it should not be understood or inferred that NE would be of the same view in other cases or circumstances.</p> <p>Once a Risk or Issue has been categorised as yellow, NE will not make further comment on the matter at subsequent deadlines, unless specifically requested to through</p>	

Description	Colour
Examining Authority (ExA) Questions. These rows will then be greyed out at subsequent deadlines in order to rationalise the risk and issues log.	
<b>Green</b> NE is in broad agreement with the Applicant's approach and has no significant outstanding concerns. As above, we reserve the right to revise our opinion should new evidence be presented.  Once a Risk or Issue has been categorised as green, NE will not make further comment on the matter at subsequent deadlines, unless specifically requested to through ExA Questions. These rows will then be shaded grey at subsequent deadlines in order to rationalise the risk and issues log.	

6. To note, although not specifically detailed in Error! Reference source not found. above, the colour grey denotes the following:

*“Once a risk or issue has been categorised as yellow or green, NE will not make further comment on the matter at subsequent deadlines, unless specifically requested to through ExA Questions. These rows will then be greyed out at subsequent deadlines in order to rationalise the Risk and Issues Log. For Deadline 1 only, some acknowledgements of minor changes made to address yellow-rated issues are present in the Risk and Issues Log.”*

## 2.1 Summary: Principal Areas of Disagreement

Table 2.1 The Applicant's comments on NE's Risk and Actions Log: Principal Areas of Disagreement

Point	Point Number(s) from Principal Areas of Disagreement Summary Statement (PADSS)	Taken from Natural England's Relevant and Written Representations Morecambe Generation- Principal Areas of Disagreement Summary Statement (PADSS)	RAG Status Rel Rep	Update Procedural Deadline A	Rag Status D1	Update D1	RAG status D2	Update D2	RAG Status D3	Update following D3	RAG Status D4	Applicant Response at Deadline 5
<b>Development Consent Order (DCO and deemed Marine License (dML))</b>												
RI_P1	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. We ask for an update to the construction noise monitoring condition to reflect standard requirements.		Condition 15 has been updated with appropriate wording.		No change						The Applicant has addressed this matter with updated wording of Condition 15 at Procedural Deadline A (PD1-002). The Applicant considers this matter resolved.
RI_P2	P2	There is no pre- or post-construction benthic, marine mammal or ornithological monitoring secured by conditions. Monitoring conditions should be included.		No change		No change		No change		No change		The In Principle Monitoring Plan (IPMP) was updated at Deadline 3 and 4 to outline monitoring measures proposed, including additional monitoring for marine mammals and ornithology (REP4-025). No further monitoring is considered to be required.
<b>Offshore Ornithology</b>												
RI_P3	P3	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 assessments across the region.		No change		In progress.		In progress		No change		The Applicant has previously addressed this matter at Deadline 2 (ID WR-097-16 of REP2-028) and anticipates this matter will be resolved with the submission of an updated Chapter 12 Offshore Ornithology at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean) and Report to Inform Appropriate Assessment (RIAA) that was submitted at Deadline 4 (REP4-009).
RI_P4	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		No change		No change.		No change.		In progress		The Applicant has previously addressed this matter at Deadline 2 (ID WR-097-18 of REP2-028) and has provided further information to support the Applicant's position at Deadline 4 (REP4-054). This additional information supplements the Offshore Ornithology Technical Note 3 (Red Throated Diver at Liverpool Bay

Point	Point Number(s) from Principal Areas of Disagreement Summary Statement (PADSS)	Taken from Natural England's Relevant and Written Representations Morecambe Generation- Principal Areas of Disagreement Summary Statement (PADSS)	RAG Status Rel Rep	Update Procedural Deadline A	Rag Status D1	Update D1	RAG status D2	Update D2	RAG Status D3	Update following D3	RAG Status D4	Applicant Response at Deadline 5
		be ruled out. The additional 18km2 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.										Special protection Area (SPA) Update Assessment) submitted at Deadline 1 (REP1-082). Notwithstanding this position, the Applicant has continued to engage with Natural England (NE) on this matter and provided a without prejudice compensation case (REP3-064). An updated without prejudice compensation case has been provided at Deadline 5 (Without Prejudice Compensatory Measures for Red Throated Diver_Rev 02 Clean) in light of progress made since Deadline 3.
RI_P5	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.		No change		In progress.		In progress.		In progress		The Applicant has provided updated assessment for lesser black-backed gull within the RIAA that was submitted at Deadline 4 (REP4-009). The Applicant considers that no adverse effect on integrity can be concluded for these SPAs, due to the very small predicted mortality for the Project alone. However, while the Applicant does not agree with Natural England's position, a well advanced without prejudice derogation case has been provided at Deadline 4 (REP3-008). The Applicant therefore anticipates that this matter can be resolved.
<b>Marine Mammals</b>												
RI_P6	P6	The applicant has not made a commitment to use Noise Abatement Systems (NAS) during construction. From January 2025 it will be an expectation that all developers proposing offshore piling activity in English waters should demonstrate best endeavours to deliver noise reductions. We anticipate that the majority of piling will not be able to proceed without noise abatement in place. The Applicant should fully commit to using noise abatement as mitigation to reduce both injury and disturbance to marine mammal receptors during construction activities. This should be reflected in a DCO/dML condition that requires		No change		No change		No change		No change		In line with the latest joint position statement (Joint Nature Conservation Committee (JNCC), Natural England and Cefas, 2025) and the marine noise policy paper (United Kingdom (UK) Government and Defra, 2025), the Applicant has committed to primary or secondary noise reduction measures (e.g. Noise Abatement System (NAS)) and commits to implement NAS for its worst case scenario (i.e., maximum strike rate and maximum hammer energy) and to review the final mitigation requirements based on the final Project design. The following documents were updated and submitted at Deadline 4 to reflect this change: <ul style="list-style-type: none"> <li>Chapter 11 Marine Mammals (REP4-011)</li> <li>Appendix 11.2 Marine Mammal Information and Survey Data (REP4-015)</li> <li>Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment (REP4-017)</li> </ul>

Point	Point Number(s) from Principal Areas of Disagreement Summary Statement (PADSS)	Taken from Natural England's Relevant and Written Representations Morecambe Generation- Principal Areas of Disagreement Summary Statement (PADSS)	RAG Status Rel Rep	Update Procedural Deadline A	Rag Status D1	Update D1	RAG status D2	Update D2	RAG Status D3	Update following D3	RAG Status D4	Applicant Response at Deadline 5
		consideration of NAS in the Marine Mammal Mitigation Protocol.										<ul style="list-style-type: none"> <li>Outline Underwater Sound Management Strategy (UWSMS) (REP4-049)</li> <li>Draft Marine Mammal Mitigation Protocol (MMMP) (REP4-027)</li> </ul> <p>Further information on the potential reduction in impact ranges, upon the application of NAS, is submitted as an Appendix to the Outline UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean) alongside this document at Deadline 5. The UWSMS has further been updated in light of discussion with Natural England and Examiners Questions (ExQ2s) regarding the different scenarios where NAS would be required without any further design refinement (Outline Underwater Sound Management Strategy_Rev 03 Clean). The commitment and the agreement of required mitigation measures is secured through the UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean).</p>
<b>Benthic Ecology and Physical Processes</b>												
RI_P7	P7	<p>Assessment of impacts to benthic habitats and physical processes is incomplete. The potential impacts from seabed preparation works have not been 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.</p> <p>Commitments to: standard mitigation measures for benthic habitats; removal of infrastructure at decommissioning and; to measures to reduce introduction of plastics to the marine environment have not yet been secured</p>		In progress. Rule 9 response presents updated worst case scenario that clarifies and includes these pressures and receptors, but this is not yet included in an updated assessment.		No change		No change. See RI_E11, RI_E13 and RI_E14		No change		<p>With regard to the assessment of impacts to benthic habitats and physical processes due to seabed preparation, the Applicant has previously addressed this matter with an updated Chapter 7 Marine Geology, Oceanography and Physical Processes (REP2-008), Chapter 8 Marine Sediment and Water Quality (REP2-010). Please refer to RI_E11 below in <b>Table 2.7</b> for a response to boulder clearance.</p> <p>With regard to standard mitigation measures for benthic habitats, a micro-siting condition has been added to the draft Development Consent Order (DCO) (Schedule 6, Part 2, Condition 9(1)(a)(v)) at Deadline 4 (REP4-002). The Applicant expects this matter can now be resolved.</p> <p>With regard to the removal of infrastructure at decommissioning, the Applicant's position is detailed in RI_E14 in <b>Table 2.7</b> below.</p> <p>With regard to the introduction of plastics to the marine environment, please refer to RI_F12 in <b>Table 2.8</b> below.</p>



## 2.2 DCO

Table 2.2 The Applicant's comments on NE's Risk and Actions Log: DCO

Point ref	Point Number(s) from Appendix A	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix A - Development Consent Order (DCO)	RAG Status Rel and Wri Rep	Update Following Procedural Deadline A	Rag Status D1	Update Following D1	Rag Status D2	Update Following D2	Rag Status D3	Update following D3	Rag Status D4	Applicant Response at Deadline 5
RI_A3	A3	The during construction monitoring condition is missing a key element that provides for a stop to works should the noise monitoring highlight the noise is significantly in excess of the noise assessed within the environmental statement. This is a key mitigation to protect marine mammal and sensitive fish species. Natural England advises that the during construction noise monitoring condition is updated to match the standard requirements.		Condition 15 has been updated with appropriate wording.		No change. No further updates to DCO and dML submitted at D1						The Applicant has addressed this matter with updated wording of Condition 15 at Procedural Deadline A (PD1-002). The Applicant considers this matter resolved.
RI_A4	A4	Natural England notes this condition requires a Marine Mammal Mitigation Protocol (MMMP). Natural England considers that this condition should refer to the requirement to consider Noise Abatement Systems (NAS) within the MMMP as these are considered important mitigation for Marine Mammals. Natural England advises that the condition to require the consideration of the use of NAS within the MMMP is amended within the dML.		No change		No change. No further updates to DCO and dML submitted at D1		No change.		No change.		See response to RI_P6 ( <b>Table 2.1</b> ), noting the Applicant considers the UWSMS provides the suitable mechanism to secure the mitigation, and no further conditions are required on the face of the deemed Marine Licence (dML).
RI_A5	A5	These conditions cover the monitoring for the project. Natural England notes that there is no pre-construction benthic, marine mammal or ornithological monitoring secured within condition 14 or post construction monitoring at condition 16. This monitoring is considered standard. We advise that monitoring conditions should be updated and informed by a pre consent In Principle Monitoring Plan.		No change		No change. No further updates to DCO and dML submitted at D1		No change.		No change.		The In Principle Monitoring Plan (IPMP) was updated at Deadline 3 and 4 to outline monitoring measures proposed, including additional monitoring for marine mammals and ornithology (REP4-025). No further monitoring is considered to be required.
RI_A6	A6	The definition of Statutory Nature Conservation Body (SNCB) is fairly open to interpretation. See below an example of wording used in other DCOs which provide more certainty with regard to the SNCB. "statutory nature conservation body" means a statutory nature conservation body, being the appropriate nature conservation body as defined in Regulation 5 of the Conservation of		SNCB definition has been updated		No change. No further updates to DCO and dML submitted at D1						The Applicant has previously addressed this matter at Procedural Deadline A (PD1-002) with an updated definition of Statutory Nature Conservation Bodies (SNCB). The Applicant considers this matter resolved.

Point ref	Point Number(s) from Appendix A	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix A - Development Consent Order (DCO)	RAG Status Rel and Wri Rep	Update Following Procedural Deadline A	Rag Status D1	Update Following D1	Rag Status D2	Update Following D2	Rag Status D3	Update following D3	Rag Status D4	Applicant Response at Deadline 5
		Habitats and Species Regulations 2017(b) or its equivalent in the Conservation of Offshore Marine Habitats and Species Regulations 2017(c) This comment also applies to Schedule 6 Part 1 condition 1, which has similar wording. For brevity this comment will not be repeated										
RI_A7	A7, A1	Natural England notes that at no point within the dML is the maximum hammer energy for piling secured. This is a key metric for the impact to marine mammals and sensitive fish species. This has been secured by condition on many similar projects, see East Anglia Two as a recent example. We would expect the maximum hammer energy for monopile and pin piles to be secured within the project design conditions.		Max hammer energy is now secured in dML		No change. No further updates to DCO and dML submitted at D1						The Applicant has now secured the maximum hammer energy in the updated draft DCO (PD1-002) submitted at Procedural Deadline A. The Applicant welcomes confirmation from NE that the change has been accepted. This matter is considered to be resolved, and no further action required.
RI_A8	A8	Within this condition there is usually a requirement to microsite the cables around features of conservation importance, as well as archaeological features. The condition as drafted only provides for exclusion of archaeological features. Natural England would note that even outside of benthic designated sites important conservation habitats such as Sabellaria spinulosa reef are protected under the NERC act and appropriate mitigation should be included. We would note this micro-siting has been included in most OWF DCOs as standard and would refer you to the East Anglia Two DCO for a recent example. Natural England advises amending the condition to include requirement to micro-site around features of conservation importance.		No change		No change. No further updates to DCO and dML submitted at D1		In progress, the Applicant has indicated that they will be including this condition. However, currently no update submitted into examination.		No change		A micro-siting condition has been added to the draft DCO (Schedule 6, Part 2, Condition 9(1)(a)(v)) at Deadline 4 (REP4-002). The Applicant anticipates this matter can now be resolved.
RI_A9	A9	Natural England notes this allows for Operations and Maintenance Plan (OMP) to be provided based on the outline operations and maintenance plan (OOMP). The OOMP implies that cable protection may be deployed throughout the operational life of the windfarm. With regard to replenishment of existing cable protection Natural England has no		No change. Addition to OOMP is useful but does not fulfill this standard requirement.		No change. No further updates to DCO and dML submitted at D1		Resolved: The Applicant has included wording which clarifies that any new cable protection and scour protection other than the				The Applicant welcomes confirmation from NE that this matter has now been resolved.

Point ref	Point Number(s) from Appendix A	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix A - Development Consent Order (DCO)	RAG Status Rel and Wri Rep	Update Following Procedural Deadline A	Rag Status D1	Update Following D1	Rag Status D2	Update Following D2	Rag Status D3	Update following D3	Rag Status D4	Applicant Response at Deadline 5
		concerns. However, deployment of new areas of cable protection should be limited to within a maximum period of ten years from the start of operations. This is Natural England's standard position for cable protection deployment after construction outside of designated sites. This would apply to the deployment of scour protection in new areas as well. Please note within benthic designated sites further cable protection during the operational phase would require a new marine licence. Natural England advises that the condition is amended to make it clear new areas of cable protection can only be deployed up to ten years following submission of the updated OMP outside of designated sites.						replenishment of existing protection must be deployed within 10 years from the date that operation of the project commences.				
RI_A10	A10, A2	Natural England notes that this condition provides that most of the plans and documentation submitted in condition 15 be submitted 4 months prior to the works. Natural England notes that due to the size and complexity of this project this time period is not appropriate. Given the large volume of documentation and the often complex nature of such we request this be amended to six months prior to commencement. Alternatively we are willing to discuss the required timing for each plan with the applicant and the MMO. We would refer to East Anglia Two as a recent example of an OWF development with a standard 6 months requirement.		In progress. Awaiting communication from applicant.		No change. No further updates to DCO and dML submitted at D1		In progress. Applicant has not yet submitted an updated timetable for pre-construction document submission into examination.		No change		The Applicant remains in consultation with NE and the Marine Management Organisation (MMO) regarding the length of discharge period for each plan. The timetable for a number of plans has been increased from 4 months to 6 months, which is presented in an updated draft Development Consent Order (DCO) at Deadline 4 (REP4-002). Following discussions with Natural England and the MMO a further number of plans have also been extended to 6 months in the dDCO at Deadline 5. It is expected that an agreed timescale for all plans will be incorporated in the final dDCO.
RI_A11	A11	Natural England notes this condition allows for the use of the Marine Recovery fund as an alternative compensation. Natural England notes that there is ongoing work on strategic compensation and would support the inclusion of appropriate provisions to allow use of agreed strategic compensation. However, the wording here is insufficient, if that is its purpose. We have included details in Annex A1 below of some draft wording we proposed for a strategic benthic provision which could also be		No change.		No change. No further updates to DCO and dML submitted at D1		Issue resolved. The Applicant has included amended wording as recommended in Annex 1 regarding the use of strategic compensation.				The Applicant welcomes confirmation from NE that this matter has now been resolved.



Point ref	Point Number(s) from Appendix A	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix A - Development Consent Order (DCO)	RAG Status Rel and Wri Rep	Update Following Procedural Deadline A	Rag Status D1	Update Following D1	Rag Status D2	Update Following D2	Rag Status D3	Update following D3	Rag Status D4	Applicant Response at Deadline 5
		extrapolated into an appropriate provision for LBBG. Natural England recommends amending this provision and consideration of how to appropriately implement a provision allowing strategic compensation options.										

## 2.3 Offshore Ornithology

Table 2.3 The Applicant's comments on NE's Risk and Actions Log: Offshore Ornithology

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
RI_B4	B4	Natural England are satisfied that the project description is adequate for assessing impacts, including the worst-case design scenario parameters (i.e. the largest number of smaller turbines) provided for collision risk modelling.										The Applicant welcomes this response.
RI_B5	B5	Natural England are satisfied that appropriate baseline data has been gathered for the purposes of ornithological impact assessment.										The Applicant welcomes this response.
RI_B6	B6	Natural England consider that the Applicant has identified the key pressures, impacts and receptors.										The Applicant welcomes this response.
RI_B7	B7	The rotation speed is given in this table as 7.74 whereas in the technical appendix Table 2.1 it is given as 7.64.										The Applicant has previously addressed this matter at Procedural Deadline A with an updated Chapter 12 Offshore Ornithology submitted at Deadline 1 (REP1-032). The Applicant considers this matter resolved.
RI_B8	B8, B24	NE's advised approach to gap-filling for the CEA has not been followed. Natural England is concerned that some projects are effectively treated as having 0 impact based on highly uncertain qualitative assessments. Proxy data from nearby OWFs should be used in preference to assigning no impact to historic OWFs that lack assessments of collision and displacement impacts.  Natural England is also concerned that approaches taken to filling data gaps by other projects to date (e.g., White Cross, Morgan, Mona) may not be aligned, leading to inconsistent assessments and confusion.  We advise that all the Round 4 Irish Sea OWF projects should		No change		In progress. Applicant has provided an update to the CEA with gap-filling in technical notes but this not yet reflected in updates to the ES chapter or assessments. Natural England will provide full		In progress. Updated CEA with gap-filling now follows NE preferred approach. It is not yet reflected in updates to the ES chapter or relevant assessment reports, but we anticipate this can be resolved once		No change		The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean).

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		be considering the same data within their CEAs to ensure consistency across the assessments. The Applicant should therefore endeavour to work with other OWF projects in the Irish and Celtic Seas as well as relevant SNCBs to generate and agree impacts from historic projects for consideration in cumulative and in-combination assessments, following Natural England's advised approach.				comments on the CEA and gap-filling work at Deadline 3.		updates are made at a later deadline.				
RI_B9	B9	<p>Some of the average mortality values the Applicant has calculated do not align with those recommended by Natural England. Through the EWG process with Round 4 wind farms, Natural England noted that there was some inconsistency between projects in the average mortality rates that were being used, despite them generally being based on the same source (Horswill and Robinson 2015). To rectify this, Natural England and NRW reviewed the evidence and calculation methods and produced standard mortality rates and reference populations for the key seabird species. An interim advice note containing this information was sent to the Applicant in April 2024 (see Annex B3).</p> <p>The differences between the Applicant's values and Natural England's are mostly minor and unlikely to make a material difference to the assessment. The most significant difference is for razorbill, where the Applicant has calculated an average mortality rate of 0.178, while Natural England recommend a value of 0.1302.</p> <p>We advise that the average mortality rates recommended in the NE and NRW interim advice</p>										<p>The Applicant has previously addressed this matter (ID WR-097-36 of REP2-028). The updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean) includes updated average mortality values advised by Natural England. The Applicant therefore considers this matter resolved.</p>

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		note are used for the assessment (see Annex B3).										
RI_B10	B10	<p>There is some inconsistency in the months assigned to each season for gannet. Where a month overlaps with both a migration season and the breeding season, Natural England advise that it should be considered as the breeding season.</p> <p>The Applicant has shaded the seasons correctly in Table 12.16, but comparison of the seasonal mean peak abundances in Table 12.21 with the array +2km buffer abundances in Table 5.76 in the Technical Report show an inconsistency, as the mean peak abundances reported are higher than any abundance values detected in the relevant months for those seasons.</p> <p>Assigning abundances to the correct NE-advised seasons would mean that no gannets were detected in the wind farm array + 2km buffer in the Spring migration period of Dec-Feb, and far fewer gannets were detected in the Autumn migration period of Oct-Nov.</p> <p>We note that the correct NE-advised months have been used for assigning collision impacts to seasons.</p> <p>The assessment should be reviewed and updated as necessary.</p>		Addressed by applicant in RR and Rule 9 response. No further comments on the proviso that this will be reflected in an updated ES in due course.								The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean).
RI_B39		Several of the total annual LCI and UCI values in the CRM results table appear to be incorrect.										The Applicant has previously confirmed these are correct (ID WR-097-38 of REP2-028; ID RR-061- 73 of PD1-011 and ID R9-05 of PD1-010) and considers this matter resolved.
RI_B11	B11, B35	NE has not been able to replicate the collision risk modelling results for little gull, so we are not providing comment on these results at Deadline 1. This may be due to an issue with the sCRM tool.		No change at D1. Applicant has supplied flight height data directly to NE but not to the		Natural England has confirmed the results of the sCRM run						The Applicant welcomes confirmation from NE that this matter has now been resolved.

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Followin g D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		<p>NE does agree that due to poor understanding of the population and migration of little gull, the Liverpool Bay SPA is likely to be used by a greater number of birds transiting the site.</p> <p>We request that the Applicant provides log files for the little gull sCRM run, including full inputs and outputs.</p> <p>Furthermore, any methodological updates should be detailed, e.g. if a bespoke flight height distribution was used.</p> <p>Natural England therefore cannot comment on the impact of the Project on little gull until these issues are addressed.</p>		Examination. NE has not yet confirmed results. Furthermore, this data has not been presented in an updated assessment.		for little gull.						
RI_B12	B12	The number of non-breeding collisions listed for great black-backed gull in this table is incorrect.		The Applicant has confirmed the error in the table, but that the correct value has been used in results.								The Applicant welcomes confirmation from NE that this matter has now been resolved.
RI_B13	B13	Natural England welcome the consideration of migratory birds and impact estimates derived by CRM. We note the low levels of predicted impact from the project alone relative to the contributing populations. Natural England are satisfied that the project alone will not result in any significant level of impact to migratory birds that are qualifying features of SPAs/Ramsar sites within 100km of the Project.										The Applicant welcomes this response and the matter is considered closed.
RI_B14	B14	Guillemot could be at risk of significant impacts due to cumulative displacement effects and should be considered in displacement assessments. Natural England's recommended approach to gap-filling should be followed.		No change.		In progress. Applicant has provided an update to the CEA with gap-filling in		In progress. NE agrees with the Applicant's revised CEA conclusion, but this		No change.		The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean).

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
						technical notes but this not yet reflected in updates to the ES chapter or assessments. Natural England will provide full comments on the CEA and gap-filling work at Deadline 3.		is not reflected in an updated ES chapter or relevant assessment reports, but we anticipate this can be resolved once updates are made at a later deadline.				
RI_B15	B15	Natural England has some reservations regarding the use of the minimum EU wintering population for little gull to measure EIA-scale impacts against. However, this is a particularly data-poor species and no BDMPS population estimate or equivalent exists. We appreciate that the Applicant has made an effort to consider the issue and provided a value to indicate the scale of impact.	-									Noted. The Applicant welcomes NE's understanding of this approach.
RI_B16	B16	Collision impacts to little gull are not currently considered in the CEA. Natural England advise that little gull abundance data from projects in the CEA is investigated and the assessment updated.	-	No change		In progress. Applicant has provided an update to the CEA with gap-filling in technical notes but this not yet reflected in updates to the ES chapter or assessments		In progress. NE agrees with the Applicants revised CEA conclusion, but this is not reflected in an updated ES chapter or relevant assessment reports,		No change		The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean).



Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Followin g D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
						nts. Natural England will provide full comments on the CEA and gap-filling work at Deadline 3.		but we anticipate this can be resolved once updates are made at a later deadline.				
RI_B18	B18, B37	Significant effect on herring gull due to collision impacts cannot be ruled out based on the applicant's cumulative assessment. NE's approach to gap filling should be followed and more robust assessments may be need for herring gull depending upon the level of risk identified.	-	No change.		In progress. Applicant has provided an update to the CEA with gap-filling in technical notes but this not yet reflected in updates to the ES chapter or assessments. Natural England will provide full comments on the CEA and gap-filling work at Deadline 3.		In progress. NE agrees with the Applicants revised CEA conclusion, but this is not reflected in an updated ES chapter or relevant assessment reports, but we anticipate this can be resolved once updates are made at a later deadline.		No change		The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean).
RI_B19	B19	Significant effects on lesser black-backed gull are not ruled out by the Applicants cumulative assessment. Natural England's recommended approach to gap filling for cumulative assessments should be followed to produce a more comprehensive assessment.	-	No change		In progress. Applicant has provided an update to the CEA with gap-filling		In progress. NE agrees with the Applicants revised CEA conclusio		No change		The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean).

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Followin g D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		We note that it may then be necessary to undertake more robust assessments depending on the remaining level of risk and uncertainty.				in technical notes but this not yet reflected in updates to the ES chapter or assessments. Natural England will provide full comments on the CEA and gap-filling work at Deadline 3.		n, but this is not reflected in an updated ES chapter or relevant assessment reports, but we anticipate this can be resolved once updates are made at a later deadline.				
RI_B20	B20	The breeding season reference population for great black-backed gull (GBBG) is overestimated due to a discrepancy in the presentation of this species in the referenced dataset. The non-breeding season BDMPS population for GBBG for SW UK & Channel of 17,742 individuals should be used as the annual reference population, in accordance with the recommendation within our interim advice note sent to the Applicant in April 2024.	-	No change		In progress. Applicant has updated the population figure in technical notes, but this is yet to be reflected in updates to the ES chapter or assessments.		No change		No change		The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean).
RI_B21	B21	The cumulative assessment for GBBG is particularly affected by the approach of assigning negligible impacts to historic projects, based on qualitative assessments. There is potentially a significant underestimate of total mortality for this species, exacerbated by the assumption made in the PVA that such historic projects have zero contribution to	-	No change		In progress. Applicant has provided an update to the CEA with gap-filling in technical notes but		In progress. Updated CEA with gap-filling now follows NE preferred approach, but is not yet		No change		The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean).



Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		<p>mortality.</p> <p>Natural England consider that there are significant cumulative effects on GBBG at the EIA scale, especially when the correct BDMPS reference population of 17,742 birds is considered.</p> <p>Natural England's recommended approach to gap filling for cumulative assessments should be followed to produce a more comprehensive assessment. We advise that the Applicant then re-runs PVA for GBBG using NE's recommended approach to gap-filling for historic projects and with this reference population as an input to indicate the significance of the adverse effect.</p> <p>We recommend that the applicant considers further avoidance or mitigation measures (e.g. increased air gap) to reduce the Project's contribution to this significant cumulative effect.</p>				this not yet reflected in updates to the ES chapter or assessments. Natural England will provide full comments on the CEA and gap-filling work at Deadline 3.		reflected in updates to the ES chapter or relevant assessment reports. NE agree that this assessment indicates moderate adverse impact on great black-backed gull. This impact remains an outstanding issue.				
RI_B23	B23	Natural England welcome the Applicant's approach to HRA, in which a comprehensive list of SPAs has been considered for impacts. We note that due to the location of Morecambe OWF, protected sites from the other devolved administrations are screened into the assessment. We highlight that Natural England are the relevant SNCB to consult on impacts to English sites, but we cannot advise on integrity judgements on sites located in Wales, Scotland, Northern Ireland, the Isle of Man, or the Republic of Ireland.										<p>The Applicant's position remains the same as ID WR-097-49 in REP2-028.</p> <p>The Applicant notes that it is considered sufficient information has been provided to enable judgements across all administrations. The Applicant has resolved matters with the Isle of Man and is in discussion with NRW. The Applicant has responded to NatureScot comments and has not received feedback from the Republic of Ireland.</p>
RI_B25	B25	Natural England note that the Applicant continues to advocate for a method that effectively reduces the total area over										The Applicant has previously addressed this matter at Deadline 2 (ID WR-097-50 of REP2-028) and has provided further information to support the Applicant's position at Deadline 4 (REP4-054). This

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Followin g D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		<p>which displacement impacts to red-throated divers are felt at the SPA by considering the diminishing displacement effect with distance from the array.</p> <p>Natural England highlight that the relevant conservation objective of most concern is to "Restore the distribution of the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting feature distribution." (<a href="https://publications.naturalengland.org.uk/publication/3236717">https://publications.naturalengland.org.uk/publication/3236717</a>)</p> <p>Whilst we recognise the desire to factor in the diminishing displacement effect to the assessment somehow, we remain of the opinion that the calculation of an 'effective displacement area' for red-throated diver is fundamentally flawed. There is no logical way to proportionally reduce the area of habitat loss by the expected level of displacement. Some level of displacement is occurring over the full extent of the area. Ultimately, calculating a (reduced) area of effect in this way underestimates the simple % of the SPA that is subject to displacement effects.</p>										<p>additional information supplements the Offshore Ornithology Technical Note 3 (Red Throated Diver at Liverpool Bay Special Protection Area (SPA) Update Assessment) submitted at Deadline 1 (REP1-082).</p> <p>Notwithstanding this position, the Applicant has continued to engage with NE on this matter and provided a without prejudice compensation case (REP3-064). An updated without prejudice compensation case has been provided at Deadline 5 (Without Prejudice Compensatory Measures for Red Throated Diver_Rev 02 Clean) given the progress made since Deadline 3.</p>
RI_B26	B26	<p>Lesser black-backed gull breeding population estimates are out of date. Natural England advise that the most recent SPA population counts for lesser black-backed gull of 862 AONs (equivalent to 1,724 breeding adults) for Morecambe Bay and Duddon Estuary SPA and 2,319 AONs (equivalent to 4,638 breeding adults) for Ribble and Alt Estuaries SPA are considered by the assessment where appropriate (e.g. when interpreting the outcomes of PVA models).</p>		No change		In progress. Colony counts have been updated in the HRA technical note, but this is yet to be reflected in updates to the ES		No change		In progress. The correct counts now appear in the without prejudice derogation case. However, they are not yet reflected in the ES or RIAA.		<p>The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean). An updated RIAA was submitted at Deadline 4 (REP4-009).</p>

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Followin g D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
						chapter or RIAA.						
RI_B27	B27	<p>For lesser black-backed gull in-combination assessments, the Applicant has used the Morecambe project as a proxy for apportioning the impacts of other projects to the Morecambe Bay and Duddon Estuary SPA. However, the cluster of windfarms in question (Ormonde, Walney 1&amp;2, Walney Extension, West of Duddon Sands) are significantly closer to the SPA colonies than the Morecambe project and are therefore likely to have a higher proportion of the birds they impact associated with this SPA. This may lead to severe underestimation of in-combination impacts.</p> <p>Natural England advise that an appropriate value for apportioning birds from Walney 1 &amp; 2 (as the central OWF in the cluster) to Morecambe Bay and Duddon Estuary SPA is calculated, and that this value is used as the proxy value for other wind farms in the cluster.</p>		No change		In progress. An appropriate proxy has been calculated, but this yet to be reflected in updates to the RIAA.		No change		No change		The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean). An updated RIAA was submitted at Deadline 4 (REP4-009).
RI_B28	B28	<p>As noted in our PEIR response, the study by Clewley et al (2020) covered the period from 2016-2019 so there is no overlap with the aerial surveys carried out for the project. During that time connectivity with existing wind farms was found for &gt;50% of the birds from the South Walney colony surveyed. The authors of the study noted that lesser black-backed gulls are more likely to forage offshore when rearing chicks. The study coincided with a period of very poor productivity at the South Walney colony. Productivity has since improved; hence it is possible that more offshore foraging was occurring at the time when the</p>										<p>The Applicant's position remains the same as ID WR-097-53 in REP2-028.</p> <p>No further response is required and the Applicant believes that the proposed without prejudice derogation case provides substantial over-compensation that would accommodate any likely increases in population.</p>

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Followin g D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		Project baseline characterisation surveys were carried out, and this could be expected to continue in the operational lifetime of the Project if the Walney colony continues to recover.										
RI_B29	B29	Impacts to lesser black-backed gull have been apportioned to colonies from which Natural England considers it highly unlikely that birds will be present in the project area. Natural England advise that in the absence of evidence, expert judgement is applied to critically appraise the likelihood of colonies contributing to the population observed within the project study area. Colonies considered unlikely to display connectivity, despite technically being within potential foraging range, should be disregarded during apportioning.		In progress. Natural England has provided a list of relevant colonies in our Rule 9 letter response. There is potential for resolution once this is reflected in an updated assessment.		In progress. The list of colonies has been used in the technical note, but this is yet to be reflected in updates to the ES chapter or RIAA.		No change		No change		The Applicant anticipates this matter will be resolved with an updated Chapter 12 Offshore Ornithology submitted alongside this document at Deadline 5 (Chapter 12 Offshore Ornithology_Rev 03 Clean). An updated RIAA was submitted at Deadline 4 (REP4-009).
RI_B30	B30	The Applicant has committed to an air gap of 25m above HAT. However, their impacts on collision-sensitive species including from SPA colonies could be decreased further by increasing the air gap further. The Applicant should consider further increases to the air gap as a means of further mitigation.		No change		Applicant has provided analysis demonstrating that this measure would not provide meaningful further mitigation. See RI_B21 for our advice on this impact.						The Applicant welcomes confirmation from NE that this matter is now resolved.
RI_B31	B31	The Applicant has presented a vessel management plan for minimising impacts on displacement-sensitive species, based on best practice guidance. It is not clear that the proposal is sufficient from the information presented. Potential ports for construction,		No change		No change. No further analysis has been provided, and therefore it is		No change.		No change.		The Applicant's position remains the same as ID WR-097-56 in REP2-028.  The Applicant notes that best practice measures are included in the Project Environmental Management Plan (PEMP) and the Vessel Traffic Management Plan (VTMP) and that no further measures are proposed or considered to be required.

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Followin g D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		operation and maintenance activity should be considered to determine if the best practice measures proposed can be implemented and adhered to. Natural England advise that further mitigation may be required such as seasonal restrictions to avoid impacts at particularly sensitive areas within the Liverpool Bay SPA.				unclear whether further commitments to reduce disturbance impacts beyond reliance on best practice measures are needed.						
RI_B32	B32	<p>The Applicant concludes no AEOL from the project alone on red-throated diver at the Liverpool Bay SPA. Natural England does not agree with this conclusion.</p> <p>Natural England conclude that the project alone will impact red-throated diver distribution over 9.07% of the total SPA, and in particular 1.24% of the original SPA area, where red-throated diver densities were sufficiently high for these areas to qualify for inclusion within the SPA. As a result, we cannot rule out AEOL from the project alone.</p> <p>We note that the projects impact is slightly reduced when considered in-combination as some areas of impact are closer to other OWFs. We advise that it is appropriate that displacement impact is assigned to the OWF in closest proximity.</p>		No change		No change. Applicant has provided further rationale for their position.		No change		No change		<p>The Applicant has previously addressed this matter at Deadline 2 (ID WR-097-50 of REP2-057) and has provided further information to support the Applicant's position at Deadline 4 (REP4-054). This additional information supplements the Offshore Ornithology Technical Note 3 (Red Throated Diver at Liverpool Bay SPA Update Assessment) submitted at Deadline 1 (REP1-082).</p> <p>Notwithstanding this position, the Applicant has continued to engage with NE on this matter and provided a without prejudice compensation case (REP3-064). An updated without prejudice compensation case has been provided at Deadline 5 (Without Prejudice Compensatory Measures for Red Throated Diver_Rev 02 Clean) given the progress made since Deadline 3.</p>
RI_B33	B33	Natural England note that 53.29% of the SPA boundary is impacted by (in-combination) OWF displacement effects on red-throated divers, with 42.55% of the original SPA being impacted. The Applicant calculates that the project contributes 8.75% and 1.06% to those in-combination totals respectively. This is slightly smaller than the project-alone		No change		No change. Applicant has provided further rationale for their position.		No change		No change		



Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		<p>impact as parts of the impacted buffer area are closer to other OWFs.</p> <p>We agree with the Applicant's position that the most concerning effect is that upon the original SPA boundary area.</p> <p>Natural England advise that the Applicant considers any opportunity to mitigate the impact on red-throated diver displacement within the original SPA boundary area, by increasing the distance between this part of the original SPA and potential turbine locations.</p>										
RI_B34	B34	<p>Natural England have advised that AEOL cannot be ruled out in-combination for red-throated diver at Liverpool Bay SPA since the Burbo Bank Extension OWF examination. Further, we understand from NRW and JNCC that the advice given to the Awel y Môr OWF related to specific factors in that area, namely the low numbers of divers encountered in the area and the findings of the post-construction monitoring of the Gwynt y Môr windfarm. As a result, the SNCBs concluded that Awel y Môr would not significantly affect the distribution of RTD in this particular area. It should be borne in mind that Morecambe OWF is impacting the northern part of the SPA, which to date, has been less impacted than the south. Given the 'restore' conservation objective for feature distribution, Natural England advise that efforts are made to mitigate the impacts of the project with respect to displacement of red-throated divers. We consider this especially critical with respect to the original SPA boundary area.</p>		No change		No change. Applicant has provided further rationale for their position.		No change		No change - please see Appendix B9 for our position on in-principle compensation measures submitted at Deadline 3.		

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
RI_B35	B35	<p>Natural England cannot comment conclusively on the impact of the Project on little gull until NE Ref B11 regarding the sCRM methodology used for this species has been addressed.</p> <p>Natural England agrees with the Applicant that the population and migration patterns of this species are poorly understood, the SPA population is likely to be an underestimate, and that the area is likely to be used by a much larger number of gulls on a transitory basis.</p>										The Applicant's position remains the same as WR-097-60 at REP2-028 and considers this matter resolved.
RI_B36	B36	<p>The results of the Applicants population viability analysis indicates a significant reduction in population size and growth rate for lesser black-backed gull. Natural England therefore considers that AEOI cannot be ruled out for this species at Morecambe Bay and Duddon Estuary SPA due to in-combination collision impacts. Whilst the contribution of the project Project is small, we retain concerns about the approach used for apportioning of impacts. Natural England advise that the apportioning is critically evaluated (RI_B27). Any changes will be reflected in the mortality increase calculation. We can then advise on the project alone impacts in the context of the likely AEOI in-combination.</p>		No change		In progress. Updates to CEA including gap-filling approach are made in technical notes but are not yet reflected in updates to the ES chapter and RIAA.		In progress. Updated CEA with gap-filling now follows NE preferred approach, but is not yet reflected in updates to the ES chapter or relevant assessment reports. NE disagrees that this assessment rules out AEOI for lesser black-backed gull at Morecambe Bay and Duddon Estuary SPA		No change		<p>The Applicant has provided updated assessment for lesser black-backed gull with the RIAA that was submitted at Deadline 4 (REP4-009). The Applicant considers that no adverse effect on integrity can be concluded for these sites, due to the very small predicted mortality for the Project alone. However, while the Applicant does not agree with Natural England's position, a well advanced without prejudice derogation case has been provided at Deadline 4 (REP3-008).</p> <p>The Applicant therefore anticipates that this matter can be resolved.</p>

Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
RI_B38	B38	Natural England considers that AEOI cannot be ruled out for LBBG at Ribble and Alt Estuaries SPA due to in-combination collision impacts. Whilst the contribution of the project Project is small, we retain concerns about the approach used for apportioning of impacts. Natural England is particularly concerned regarding impacts to this SPA given the recent population declines and noting that the projects impacts are predominantly apportioned to this SPA. Natural England advise that the apportioning is critically evaluated (RI_B27). Any changes will be reflected in the mortality increase calculation. We can then advise on the project alone impacts in the context of the likely AEOI in-combination.		No change		In progress. Updates to apportioning have been made in technical notes but are not yet reflected in updates to the ES chapter and RIAA. Natural England will provide full comments on the CEA and gap-filling work at Deadline 3.		In progress. Updated CEA with gap-filling now follows NE preferred approach, but is not yet reflected in updates to the ES chapter or relevant assessment reports. NE disagrees that this assessment rules out AEOI for lesser black-backed gull at Ribble and Alt Estuaries SPA		No change		
RL_B39		<b>New issue at Deadline 4:</b> 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 expected to occur by the time the Project is operational, there could be value in using monitoring to determine whether this is the case.	/	/	/	/	/	/	/	New Issue		The Applicant does not consider that collision monitoring for the Project is justified or would generate meaningful results, noting the very small predicted lesser black-backed gull mortality arising from the Project alone. Whilst the Applicant recognises that annual mortality could increase if the breeding populations at the respective SPAs increase, such a change is likely to make little difference (i.e. a fraction of a bird per year) in terms of mortality at the Project site. It is doubtful that such a change could be detected at a Project level.  The most meaningful monitoring is likely to be achieved at the SPAs themselves, to understand the trajectory of breeding populations in response to, for example, improved predator control at these sites. While it is possible that some understanding of the external pressures on the breeding populations could be obtained from this monitoring, it very unlikely that the effects of windfarms could be untangled from the other pressures. As set out in the



Point	Point Number(s) from Appendix B	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B - Offshore Ornithology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		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.										Applicant's submissions (including the RIAA; REP4-009), it is likely that other pressures (such as closure of landfill sites and effects of predation) will be having a much more substantial effect. The Applicant would expect that such monitoring would be delivered (by Natural England and/or site managers) as part of the existing management of the SPAs, and does not consider that it should be the responsibility of the Project to deliver this, taking into account the many other pressures on the population.
RL_B40		<b>New issue at Deadline 4:</b> 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.	/	/	/	/	/	/	/	New issue		It is the Applicant's position that the existing baseline surveys for the Project provide a suitable reference against which any future change in red-throated diver abundance/distribution could be monitored. However, the Applicant is happy to discuss the requirement for additional pre-construction monitoring with Natural England to ensure that any proposals are appropriate and have sufficient power to detect any change. It is considered this detail would be agreed in the monitoring plan post-consent.

### 2.3.1 Ornithology Compensation

Table 2.4 The Applicant's comments on NE's Risk and Actions Log: Ornithology Compensation

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
Compensation measure: Feature Exclusion of mammalian predators at colonies using fencing												
RI_G6	Overall confidence in the measure	Natural England is moderately confident in this measure. We are content that the measure is likely to be effective, but we do not agree that the compensation level proposed and therefore the scale and extent of the measure is appropriate. Furthermore, no landowner agreement has been secured for the evaluated sites and this would be required to provide sufficient certainty that the measure is deliverable.		Summary comment.		In progress. Area quoted for Banks Marsh has potential to deliver compensation at sufficient scale, although there has been less progress on this option. No changes to scale of Steep Holm measure proposed. Applicant has confirmed formal landowner permission for Banks Marsh and in principle support of Steep Holm landowner. No updates to the proposed compensation level have been made.		No change.		No change.		An update to the Habitats Regulations Assessment (HRA) Without Prejudice Derogation Case (REP3-008) was submitted at Deadline 3, which included an increase to the compensation level. It is reiterated that the proposed measures will over-compensate any predicted loss by a substantial margin, and therefore any re-estimation would make no difference to the delivered compensation.
RI_G7	Theoretical merit to deliver compensation	This measure is likely to be effective and could directly benefit either the impacted population of the lesser black-backed gull (LBBG) feature of the Morecambe Bay and Duddon Estuary SPA (M&DE) or the Ribble and Alt Estuaries SPA										The Applicant welcomes confirmation from NE that this measure is likely to be effective in delivering compensation.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		(R&AE) if the fence was inside one of them, or the wider meta-population from which the SPAs draw their recruits if located in the vicinity. Vegetation within the fenced area would need to be monitored and some works outside the breeding season may be necessary to create optimum nesting habitat. This has been considered by the Applicant.										
RI_G8	Technical feasibility	<p>We welcome the Applicant's undertaking that proposed predator-proof fence design would be informed through discussion with the proposed lesser black-backed gull compensation steering group (LBBGCSG) and with reference to RSPB guidance should this compensation measure be adopted. We suggest that fence design receives careful consideration, and we highlight how capable badgers in particular can be in their ability to climb high fences.</p> <p>We recognise that recent predator-exclusion fencing at South Walney (M&amp;DE SPA) appears to have contributed to an increase in nesting LBBG demonstrates that this measure can be successful in increasing the number of nesting pairs, at least in the short-term.</p>										The Applicant welcomes confirmation from NE that this measure is likely to be technically feasible.
RI_G9	Agreed compensation level, G2, G3	An appropriate impact value is yet to be agreed for lesser black-backed gull at Morecambe Bay and Duddon Estuary SPA and		No change		No change. No updates to the proposed compensatio		No change.		No change		An update to the HRA Without Prejudice Derogation Case (REP3-008) was submitted at Deadline 3, which included an increase to the compensation level. It is reiterated that the proposed measures will over-compensate any predicted loss by a substantial

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Followin g D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		<p>Ribble and Alt Estuaries SPA. Natural England's advice is that the project alone impacts are currently an underestimate, meaning that the proposed compensation level is likely to be inadequate once the impact values are updated following our advice (see our Relevant Representations and Risk and Actions Log tab B). Once an appropriate impact value is identified, Natural England advise that for the purposes of scaling compensatory measures, the precautionary upper confidence limit impact is the appropriate level of mortality to consider. Increases in numbers of LBBG within the recently fenced area at South Walney within the M&amp;DE SPA, and the proposed 'mega-fence' at Banks Marsh within the R&amp;AE SPA, means that the impacts on lesser black-backed gull from the project apportioned to each SPA, both alone and in-combination, are likely to increase. Therefore the compensation level is likely to be inadequate as a future-proof measure on this basis as well. We also have concerns about how the level of compensation has been calculated. A very basic calculation has been undertaken to determine the size of the breeding population that will be required to generate the required number of adults into the population each year. Only productivity and</p>				n level have been made.						margin, and therefore any re-estimation would make no difference to the delivered compensation.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		survival are considered. We advise that the method used by Hornsea 3 OWF to calculate requirements for their kittiwake compensation is also relevant to LBBG, and we recommend that this be used instead by the Applicant. Under these circumstances, it is difficult to agree with the proposed requirement to create an additional 18 lesser black-backed gull nests annually to compensate for the loss of 4 adult gulls.										
RI_G10	Scale/extent of measure, G2, G3	<p>A site has not yet been secured, so we cannot advise on the scale of nesting habitat provision. We acknowledge that the size of the fenced areas required (assuming one of the sites in question can be secured), has been considered and would likely be adequate to deliver the proposed compensation level, even at lower LBBG nesting densities.</p> <p>Following our advice on the likely inadequacy of the proposed compensation level, the scale at which this measure is required to be delivered is also likely to be an underestimate. Increased foraging distances are likely to occur with increased numbers of birds at the impacted SPA colonies, meaning more birds are likely to encounter OWFs, increasing collision risk. Relocation of adults from other nearby sites with less suitable habitat is not considered in the proposed</p>		No change		In progress. Area quoted for Banks Marsh has potential to deliver compensation at sufficient scale, although there has been less progress on this option than for Steep Holm, where the scale of the measure proposed has remained the same		No change.		No change		

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		compensation ratio. We therefore advise that compensation levels could be future-proofed by considering an increase in extent of the measure (and see also comments on the proposed scrub clearance measure on Steep Holm below).										
RI_G1 1	Timing: Deliverable before impact	<p>LBBG reach breeding age maturity at 4 years old and it is unlikely that offspring fledging from the compensation site will have recruited into the adult breeding population (and thereby started providing compensation) by the time the development is operational. This is of particular relevance in light of concerns that a compensation site has yet to be secured for this measure (see below). However, we welcome the consideration of potential mortality debt under these circumstances detailed, and acknowledge that two separate compensation measures have been proposed. We consider that both are feasible options that, if successful, could potentially deliver in excess of the currently proposed compensation level, thereby addressing any accrued mortality debt early in the operational lifespan of the project.</p> <p>If the compensation ratio were to be found inadequate and thus recommended for a modest increase, there could be a greater initial mortality debt. We consider</p>										The Applicant welcomes confirmation from NE that this measure could be delivered prior to any impact.



Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		this debt could still be compensated for if the measure was implemented at appropriate scale.										
RI_G1 2	Location of measure, G1	No landowner agreement has been secured for this measure, without this Natural England cannot be confident that it is deliverable. This should be secured as soon as possible.		No change		In progress. The Applicant refers to letter from landowner confirming in principle agreement to delivery of the measures						The Applicant 's position remains the same as that outlined in ID WR-097-69 (REP2-028) and this matter is resolved, with landowner evidence provided.
RI_G1 3	Long term implementation	<p>We welcome the commitment to the regular monitoring of the integrity of the fence both for predator incursion and for the state of vegetation within the compensation site, noting that even a single night of predator ingress could significantly undermine colony re-establishment. We also welcome the commitment to long-term monitoring.</p> <p>We recommend that the BTO ringing and colour-ringing scheme and re-sightings surveys should continue beyond the first 3 years of implementation of the compensation plan, and until such time as quantum is achieved (including the discharging of any mortality debt), to ensure that those juveniles colour-ringed at the site can be followed through to at least 4 years of age when breeding could commence. This would help document that the compensation measure had contributed additional</p>										The Applicant welcomes confirmation from NE that the proposed outline monitoring proposals are suitable.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		<p>adults into the impacted population. We are aware that colour ringing has been ongoing for many years at South Walney and is already underway on Steep Holm.</p> <p>Initially, hatching and fledging success should be monitored by three visits throughout the breeding season to count eggs, hatched eggs and fledging young. Drones could be used for this purpose and novel methods, such as thermal drone surveys, could be explored if it is considered they provide more accurate results. Initial ground-truthing of drone surveys would be required to calibrate the detection rate of nests/young.</p> <p>We recognise that individual colony performance should be considered holistically in relation to other LBBG colonies, but welcome the undertaking to explore reasons for failure and consequent adaptive management measures if considered necessary.</p>										
RI_G1 4	Success criteria/Ability to prove additionality	See above.										
RI_G1 5	Suitable as sole measure for target species	Subject to a suitable site being secured, Natural England consider that this measure alone could theoretically deliver an appropriate level of compensation.										The Applicant welcomes confirmation from NE that this measure could be deliver an appropriate level of compensation.



Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
Compensation measure: Feature Scrub clearance and habitat management on Steep Holm												
RI_G1 6	Overall confidence in the measure	We are confident that this measure will be effective, but we do not agree that the proposed compensation level or extent is appropriate.		Summary comment.		In progress. No changes to scale of Steep Holm scrub clearance measure proposed. No updates to the proposed compensation level have been made. In principle support of the landowner has been confirmed.		No change.		No change.		An update to the HRA Without Prejudice Derogation Case (REP3-008) was submitted at Deadline 3, which included an increase to the compensation level. It is reiterated that the proposed measures will over-compensate any predicted loss by a substantial margin, and therefore any re-estimation would make no difference to the delivered compensation.
RI_G1 7	Theoretical merit to deliver compensation	<p>Steep Holm SSSI sits within the Severn Estuary SPA. Neither designation have LBBG as a designated breeding feature. Nor does the Severn Estuary Ramsar site, however it was identified for a possible future consideration as a breeding feature. In 1993, 2,040 pairs of lesser black-backed gull bred on the islands of Flat Holm and Steep Holm, representing 2.5% of the British total. Since then, numbers fluctuated on Steep Holm, increased on Flat Holm, but both have suffered notable declines in recent years (SMP database). Therefore the proposed intervention has the potential to result in increases in the LBBG population.</p> <p>Although LBBG appear to show high philopatry,</p>										The Applicant welcomes confirmation from NE that this measure is likely to be effective in delivering the required compensation.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Followin g D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		primarily recruiting into the breeding population at the natal site, it is entirely possible that individuals fledging from Steep Holm could recruit into other nearby lesser black-backed gull colonies such as the Skomer, Skokholm and the Seas off Pembrokeshire SPA or Isles of Scilly SPA, thereby contributing to the coherence of the site network. Further, given Steep Holm sits within the Severn Estuary SPA, should the population be increased to a level where it was considered to qualify as a new feature of the SPA, these LBBGs could themselves form part of the network in due course.										
RI_G1 8	Technical feasibility	<p>We welcome the Applicant's undertaking that scrub clearance would be informed through discussion with the LBBGCSG should this compensation measure be adopted. We also recognise that habitat variables are important and welcome discussion on how a proportion of the plateau area on Steep Holm could be cleared of scrub and subsequently be subject to further enhancements.</p> <p>We agree that encroachment of scrub appears to be a key factor in the decline in lesser black-backed gull nests on Steep Holm and suggest that scrub clearance and habitat management is likely to be an effective measure, thereby</p>										The Applicant welcomes confirmation from NE that this measure is considered technically feasible.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Followin g D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		<p>potentially addressing impacts on lesser black-backed gull by improving productivity. We understand that the proposed works should be able to achieve SSSI consent, as potential impacts to the vascular plant assemblage SSSI feature can be avoided. Sufficient monitoring of both the plateau and cliffs during the initial years of scrub clearance should provide sufficient evidence that the measure is successful.</p> <p>It is worth noting that under current arrangements, Steep Holm is served by a RIB from both Weston-super-Mare and Cardiff. Trips are highly dependent on prevailing weather conditions (wind/swell) and the state of the tide, with beach availability always restricting landings on the island, and a primary consideration when travelling from Weston-super-Mare. We appreciate that coordinating scrub clearance works under these conditions may be challenging but suggest that, should this measure be adopted, opportunities for scrub clearance are maximised at an appropriate time of year (September to February), subject to landowner agreement, whenever they become available within this timeframe to mitigate the risk that no works are possible due to inaccessibility. We understand that a potential contractor for works has</p>										

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		been identified who is able to be flexible regarding the timings of works. If appointed, it may be necessary for them to be flexible with respect to embarkation point as well.										
RI_G19	Agreed compensation level, G2, G3	See comments on compensation level for the measure "exclusion of mammalian predators at colonies using fencing" above.		No change		No change. No updates to the proposed compensation level have been made.		No change.		No change.		An update to the HRA Without Prejudice Derogation Case (REP3-008) was submitted at Deadline 3, which included an increase to the compensation level. It is reiterated that the proposed measures will over-compensate any predicted loss by a substantial margin, and therefore any re-estimation would make no difference to the delivered compensation.
RI_G20	Scale/extent of measure, G2, G3	Following our advice on the likely inadequacy of the proposed compensation level, the scale at which this measure is required to be delivered is also likely to be an underestimate. Increased foraging distances are likely to occur with increased numbers of birds at the impacted SPA colonies, meaning more birds are likely to encounter OWFs, increasing collision risk. Relocation of adults from other nearby sites with less suitable habitat is not considered in the proposed compensation ratio. Nesting birds from the cliff at Steep Holm could relocate to the plateau, which would need to be accounted for. We recommended that the cliff nesting birds are surveyed (likely using a drone due to practical considerations) to monitor this effect and its implications for the level of compensation actually being delivered. Up to 40 muntjac deer are estimated to be resident on Steep Holm. Birds' eggs can reportedly constitute a		No change		No change. No increase to the extent of the measure has been proposed.		No change.		No change.		Final estimates of the extent of compensation relative to compensation requirements were presented in an update to the HRA Without Prejudice Derogation Case (REP3-008), which was submitted at Deadline 3. It is reiterated that the proposed measures will over-compensate any predicted loss by a substantial margin, and therefore any re-estimation would make no difference to the delivered compensation.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		part of a muntjac's diet. We would recommend that hatching success is monitored at nest sites with no muntjac access (e.g. on the roofs of suitable buildings) and compared with hatching success from ground nests on the plateau, to assess the possibility that muntjac are predating or destroying some eggs. We accept however that such sites may not exist and that fenced enclosures on Steep Holm would be impractical (if not impossible) due to the thin soil and limestone bedrock. Due to these factors, we advise that a greater extent for this measure than currently proposed should be considered.										
RI_G2 1	Timing: Deliverable before impact	LBBG reach breeding age maturity at 4 years old, and offspring fledging from the compensation site will not have recruited into the adult breeding population (and thereby started providing compensation for the project's in-combination impacts) by the time the development is operational. However, we welcome the consideration of potential mortality debt under these circumstances and acknowledge that two separate compensation measures have been proposed. We consider that both are feasible options that, if successful, could deliver in excess of the currently proposed compensation level, should that be agreed, thereby addressing any accrued										The Applicant welcomes confirmation from NE that this measure could be delivered prior to any impact.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Followin g D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		mortality debt early in the operational lifespan of the project. However, if the currently proposed compensation ratio were to be found inadequate, there would be a greater mortality debt. We consider this debt could still be compensated for if the measure was implemented at appropriate scale.										
RI_G2 2	Location of measure	We welcome that landowner agreement has already been secured with the Keneth Allsop Memorial Trust for this measure and are aware that further positive discussions are taking place.										The Applicant welcomes this response.
RI_G2 3	Long term implementation	We welcome the commitment to long-term monitoring. We also recommend that the BTO ringing and colour-ringing scheme and re-sightings surveys should continue beyond the first 3 years of implementation of the compensation plan, and until such time as quantum is achieved (including the discharging of any mortality debt), to ensure that those juveniles colour-ringed at the site can be followed through to at least 4 years of age when breeding could commence. This would help document that the specific measure had contributed additional adults to the colony directly as a result of the compensation. We are aware that colour ringing has been ongoing for many years at South Walney and already underway on Steep Holm.										The Applicant welcomes this response.



Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		<p>Initially, hatching and fledging success should be monitored by three visits throughout the breeding season to count eggs, hatched eggs and fledging young. Drones could be used for this purpose and novel methods, such as thermal drone surveys, could be explored if it is considered they provide more accurate results. Initial ground-truthing of drone surveys would be required for the plateau, at least initially, to identify a correction factor to accurately calibrate the detection rate of nests/young. These could then be applied to drone surveys of the cliffs, as ground-truthing would be impossible there.</p> <p>We recognise that individual colony performance should be considered holistically in relation to other lesser black-backed gull colonies but welcome the undertaking to explore reasons for failure and consequent adaptive management measures if considered necessary, although we note that supplementary feeding would not be practical on Steep Holm.</p>										
RI_G2 4	Success criteria/Ability to prove additionality	See above.										As above.
RI_G2 5	Suitable as sole measure for target species	Successful clearance of scrub and subsequent habitat management of an appropriately sized area could theoretically deliver										The Applicant welcomes this response.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		the currently proposed scale of compensation for impacts on lesser black-backed gull alone.										
Additional detailed comments (table 2 Relevant Reps B1)												
RI_G4	G4	<p>It is stated that Steep Holm; "accommodated over 1,500 nesting pairs of lesser black-backed gulls in 1995 when the island was relatively free of scrub" and references the Severn Estuary SPA citation as a source.</p> <p>Neither the referenced citation nor the Seabird Monitoring Programme database support this count for that year. We do accept that the count of lesser black-backed gull on Steep Holm has historically been higher. e.g. 596 AONs/pairs in 2018 (880 AONs/pairs in 1997 was part of a gap-filling exercise), and that scrub encroachment is likely to be a contributory factor in the decline.</p>		Applicant acknowledged error, issue resolved provided this is reflected in updated plan								This error was corrected in an update to the HRA Without Prejudice Derogation Case (REP3-008), which the Applicant submitted at Deadline 3. This Applicant considers this matter is now resolved.
RI_G5	G5	The proposed monitoring measure is proposed for the first three years following implementation only. This would not allow sufficient time to see whether juveniles fledging from the compensation site(s) were being recruited into the breeding population after 4 years (as one might expect from a species exhibiting high philopatry). Colour ringing of gulls has been on-going at South Walney for some years (by RSPB/North West Gull Project) and for 2 years on Steep Holm already (by Severnside		No change		No change. No updates to the monitoring of these measures have been made.		No change.		No change.		Further detail on monitoring was provided in an update to the HRA Without Prejudice Derogation Case (REP3-008), which the Applicant submitted at Deadline 3.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		<p>Ringling Group).</p> <p>The number of productivity monitoring visits should be specified as it is not currently stated.</p>										
Compensation measure: Provision of nesting rafts for red-throated diver												
RI_G2 6		<p><b>New issue at Deadline 4:</b></p> <p>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.</p>	/	/	/	/	/	/	/	New issue		The Applicant provides an update to the red-throated diver compensation proposals at Deadline 5 (Without Prejudice Compensatory Measures for Red Throated Diver_Rev 02 Clean)
RI_G2 7		<p><b>New issue at Deadline 4:</b></p> <p>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.</p> <p>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.</p> <p>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</p>	/	/	/	/	/	/	/	New issue		The Applicant confirms that contribution to a strategic fund remains a favoured option, should it become available, and will continue to monitor developments, as Natural England suggests.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Followin g D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		an appropriate contribution might entail.										
RI_G2 8		<b>New issue at Deadline 4:</b> The Applicant should carefully consider whether the presence of American mink in some areas may significantly compromise the 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. 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.	/	/	/	/	/	/	/	New issue		The Applicant notes this comment and confirms that predation risk (both from mink and other species) will be considered as compensation proposals are further developed. This would also be addressed through design of the measure and adaptive management, if required.
RI_G2 9		<b>New issue at Deadline 4:</b> 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	/	/	/	/	/	/	/	New issue		The Applicant notes this comment. The proposed measures will seek to increase productivity of existing breeding red-throated divers where possible, and it is not expected that locations in close proximity to existing red-throated diver SPAs will be proposed. However, where rafts at new breeding locations are provided, it seems unlikely that this would draw birds from existing SPA populations (where conditions for this species are likely to be optimal). It would also be the case that the increased population arising from the compensation would provide additional birds into the SPA breeding populations.

Point	Point Number(s) from Appendix B1	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix B1 - Offshore Ornithology Compensation	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Followin g D2	RAG status D3	Update following D3	Rag status D4	Applicant Response at Deadline 5
		rationale provided. We advise that the relevant SNCB (NatureScot) should be consulted regarding potential impacts on Scottish protected sites.										

## 2.4 Fish and Shellfish Ecology

7. Note that for Fish and Shellfish Ecology, all matters are considered 'resolved'.

Table 2.5 The Applicant's comments on NE's Risk and Actions Log: Fish and Shellfish Ecology

Point	Point Number(s) from Appendix C	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix C - Fish and Shellfish Ecology	RAG Status Rel and Wri Rep	Update Following Procedural Deadline A	RAG Status D1	Applicant Response at Deadline 5
RI_C2	C2	Natural England are content that the detail provided is sufficient to inform the Maximum Design Scenario (MDS) and Environmental Impact Assessment (EIA) as it relates to Fish and Shellfish Ecology.				The Applicant welcomes this response.
RI_C3	C3	<b>Update I1D1</b>				n/a
RI_C4	C4	It is stated "Adult Atlantic salmon are observed to commence entry into the Leven, Kent, Lune, and Wyre rivers during early spring, whilst sea trout commence entry in June (through until the autumn), although the upstream migration of sea trout is not considered as extensive". However, no referenced evidence is provided to support this statement.				This matter was addressed in ID RR-061-154 of PD1-011. The Applicant considers this matter resolved.
RI_C5	C5	It is stated " <i>These species are unlikely to be encountered in the windfarm site, as (except in the case of sea lamprey) they remain in close association with estuarine environments during the marine phase of their life cycle.</i> " However, no referenced evidence is provided to support this statement.				This matter was addressed in ID RR-061-155 of PD1-011. The Applicant considers this matter resolved.
RI_C6	C6	In [APP-047] it is stated " The current understanding is that European eels spawn in the Sargasso Sea, but there are potentially other, more distant, spawning grounds, and the routes to and from these spawning grounds for European eels remain unclear.". However, no referenced evidence is provided to support this statement. Natural England are not aware of any potential alternative spawning grounds for European eel.				This matter was addressed in ID RR-061-156 of PD1-011. The Applicant considers this matter resolved.
RI_C7	C7	Natural England defer to CEFAS on data sources, assessment methodology and conclusions in relation to herring and sandeel.				The Applicant notes this response.
RI_C8	C8	The dynamics between protected avian predator species (i.e. piscivorous species of Liverpool Bay SPA) and prey (i.e. sandeel, herring) has been discussed in collaboration with Natural England ornithological specialists and impacts to birds due to prey fish losses have been deemed unlikely despite proximity to Liverpool Bay SPA.				The Applicant welcomes this response.
RI_C9	C9	While underwater noise (UWN) modelling has been conducted to determine noise thresholds for impacts to fish as both moving fleeing and static stationary receptors, it is Natural England's view that fish should only be considered as static receptors when modelling underwater sound thresholds and assessments should be based on the static animal modelling results.  Natural England's Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards states:  "There is currently insufficient evidence to support the inclusion of fleeing behaviour of fish into models. Whilst some degree of movement would be expected, fish may also choose to remain in the affected area (e.g., due to prey availability or mating opportunities) despite the harmful noise exposure (Faulkner et al. 2018). Therefore, for the purposes of environmental assessments, it is currently advised that fish				The Applicant's position is as per ID WR-097-92 of REP2-028. The Applicant notes NE's position that these matters are unlikely to make a difference to the outcome of the decision-making process. No further action required.



Point	Point Number(s) from Appendix C	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix C - Fish and Shellfish Ecology	RAG Status Rel and Wri Rep	Update Following Procedural Deadline A	RAG Status D1	Applicant Response at Deadline 5
		are considered to be stationary receptors within underwater noise models. However, applications may also assess the effects of underwater noise with fleeing behaviours included within the model, if presented in addition to assessments of stationary receptors."				
RI_C10	C10	<p>Further to the above comment, while it is useful to display Temporary Threshold Shift (TTS) UWN range and impact ranges for fleeing and stationary animals in tabular format, it would be preferable to have underwater noise contour maps for the site displaying these ranges. This would allow Natural England to visually assess proximity to protected sites more easily. We advise these figures also clearly state the piling scenario modelled and includes the UWN modelling locations and protected site boundaries. While Figure 3.8 displays an example plot, this is assuming the animal is a fleeing receptor, not stationary (see comment above for reasoning).</p> <p>Natural England advise that it is difficult to gauge TTS and Sound Exposure Level (SEL) threshold UWN impact ranges for stationary receptors in relation to protected sites without a contour map.</p>				The Applicant's position is as per ID WR-097-93 of REP2-028. The Applicant notes NE's position that these matters are unlikely to make a difference to the outcome of the decision-making process. No further action required.
RI_C11	C11	<p>Natural England do not agree with the use of Marine Mammal Mitigation Protocol (MMMP) methods such as soft start and ramp up as a means of mitigation for fish species.</p> <p>This mitigation is designed primarily for cetaceans that regularly exhibit consistent fleeing behaviours, i.e., detect noise and move away from the area of influence. The few studies investigating fish fleeing responses do not show consistent, directional fleeing out of the area of influence. Fish responses to underwater noise are highly variable, and rarely directional (i.e., shoaling in place, or in haphazard directions, flinching, fleeing into shelter)</p>				The Applicant's position is as per ID WR-097-94 of REP2-028. The Applicant notes NE's position that these matters are unlikely to make a difference to the outcome of the decision-making process. No further action required.
RI_C12	C12	Natural England acknowledges and agrees with findings of no or negligible impacts to Annex II diadromous fish species.				The Applicant welcomes this response.
RI_C13	C13	Natural England acknowledges and agrees with findings of no or negligible impacts to MCZ fish features.				The Applicant welcomes this response.

## 2.5 Marine Mammals

Table 2.6 The Applicant's comments on NE's Risk and Actions Log: Marine mammals

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
RI_D10	D10	The maximum pile diameter for monopiles and jacket piles differs between the ES Chapter and the underwater noise modelling.										The Applicant addressed this matter in PD1-011 (ID RR-061-174) and REP2-028 (WR-097-97) and considers there is no further action.
RI_D11	D11	The maximum piling duration in the RIAA and ES is based on piling at a higher strike rate, making the duration per pin pile installed 38% shorter. The applicant should use the lower strike rate to determine the realistic maximum piling duration and use this in their assessment.		No change  Potential resolution once Applicants rationale from Rule 9 response is included in a named plan.		In progress.  Potential resolution once Applicants rationale from Rule 9 response is included in a named plan.		No change		No change		The Applicant anticipates this matter will be resolved with the updated Chapter 11 Marine Mammals (REP4-011) that was submitted at Deadline 4.
RI_D12	D12	The Applicant has used a maximum charge weight of 353.5kg for UXO, which is contrary to Natural England's Best Practice Advice to use a nominal 750 kg weight. The donor charge for high order clearance is also typically greater than 0.5 kg, and should be added to the total NEQ. When applying for the UXO licence post-consent,		The Applicant refers back to their desk based UXO research that the worst case UXO for clearance is predicted to be 356.6kg.								The Applicant notes this response and considers this matter resolved, but noted for the future marine licence application for UXO.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		ensure that an appropriate maximum UXO charge weight plus donor charge is modelled.										
RI_D13	D13	No reference is made to the presence of harbour seals on the Isle of Man. Given its geographical location, any harbour seals here should be included in the reference population. Clarify the presence of harbour seal on the Isle of Man and include in the assessment if necessary.		The Applicant states that the Manx Wildlife Trust have indicated that there is little or no information on any resident harbour seals on the Isle of Man to be considered in the Applicant's assessments. Unlikely to affect conclusion of assessment.								The Applicant notes this response and considers there is no further action.
RI_D14	D14	The Applicant should clearly present the numbers added to each species' total through their apportioning approach.										The Applicant addressed this matter in PD1-011 (ID RR-061-178) and REP2-028 (WR-097-101) and considers there is no further action.
RI_D15	D15	Natural England advises that the reference population for grey seal should be the NW England MU alone. Revise assessment so that it is undertaken against the NW MU grey seal population alone, as the		The Applicant states that the 'combined population' consists of the NW MU and and the Isle of Man population, and that this approach has been justified								The Applicant notes this response and considers there is no further action.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		reference population.		to NE on the 12th of September. NE agreed that the differing approaches do not make a substantial change to the outcome of the assessment.								
RI_D16	D16	The baseline noise levels have not been presented, despite the NPS requirement.										The Applicant addressed this matter in PD1-011 (ID RR-061-178) and REP2-028 (WR-097-103) and considers there is no further action.
RI_D17	D17	Natural England agree with the project-specific harbour porpoise density used in the project assessment, which is based on the average summer density. We note that the average summer density (1.62 animals/km2) is marginally higher than the average winter density (1.53 animals/km2), meaning that it is the worst-case but also appropriate for assessment of impacts during winter (which is relevant to the Bristol Channel Approaches SAC in particular).										The Applicant welcomes this response and considers this matter closed.
RI_D18	D18	The Applicant refers to habitat preference										The Applicant addressed this matter in PD1-011 (ID RR-061-182) and WR-097-105 of REP2-028 and considers there is no further action.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		modelling for the Celtic and Irish Seas by Lepple (2023 unpublished). Natural England is not aware of this report, but it appears relevant to the baseline characterisation and so should be included.										
RI_D19	D19	It is not clear what the Applicant means when they say that the (best) data from Evans and Waggitt (2023) and/or Waggitt et al. (2019) were applied to the area of SCANS-IV block CS-E. We request further information on this approach.										The Applicant addressed this matter in PD1-011 (ID RR-061-183) and WR-097-106 of REP2-028 and considers there is no further action.
RI_D20	D20	The density of harbour seal used in the assessment has significantly reduced (by a factor of 200) between the PEIR and the Application. The densities in both documents have been calculated from the same source (Carter et al., 2022), so it is unclear why they differ so significantly. Revise the assessment so that it uses the harbour seal density presented		No change		No change		Resolved. ES value is correct				The Applicant welcomes confirmation from NE that this matter is now resolved.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		in the PEIR. Unless sufficient justification can be presented as to why it differs so significantly.										
RI_D21	D21	Natural England advises that dolphin and seal species should be assumed to have the same (medium) sensitivity to disturbance effects and over a similar range as harbour porpoise (~25km range). The sensitivity values should be changed and the assessment revised accordingly.		No change. Applicant to update at Deadline 1.		In progress. Potential resolution once updated assessment from technical note is included in Chapter 11.		No change		No change		The Applicant anticipates this matter will be resolved with the updated Chapter 11 Marine Mammals (REP4-011) that was submitted at Deadline 4.
RI_D22	D22	The Applicant has not presented an assessment of the impacts from vibro-piling. Whilst vibro-piling is not the worst-case, it would be beneficial to assess the impacts from it in case this pile installation method is used.										The Applicant addressed this matter in PD1-011 (ID RR-061-186) and REP2-028 (ID WR-097-109) and considers there is no further action.
RI_D23	D23	It would have been beneficial to assess barrier effects to seals using the known response distances and/or dose-response relationships with the noise contours. This approach										The Applicant addressed this matter in PD1-011 (ID RR-061-187) and REP2-028 (ID WR-097-110) and considers there is no further action.



Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		would be preferable to using the TTS distances, as disturbance can occur at greater distances than TTS.										
RI_D24	D24	We note that, based on a TTS distance of 34 km for minke whale, there is potential for barrier effects to extend to the coast during piling.										This matter was addressed at Deadline 1 (REP1-030) (see ID WR-097-111 of REP2-028) and considers there is no further action.
RI_D25	D25	The Applicant has not presented information to justify why minke whale has a medium sensitivity to collision risk, compared to low sensitivity for other marine mammals. We advise that sensitivity to collision risk should be medium for all species. We consider this appropriate based on the statement in paragraph 11.475. The applicant should change the sensitivity of all marine mammal species to collision risk to medium and update the collision risk assessment.		No change.		No change. A rationale has been provided but no updates have been made to ES Chapter 11.		No change		NE has reviewed evidence presented in technical notes and whilst we do not agree with the approach, we do not believe it will make a material difference to outcomes in this case.		Noted, the evidence presented has been incorporated in the updated Chapter 11 Marine Mammals (REP4-011) submitted at Deadline 4. The Applicant notes NE's position that these matters are unlikely to make a difference to the outcome of the decision-making process. No further action required.
RI_D26	D26	The values in the collision risk rate (%) do not appear correct. For example, for harbour porpoise: the number of										The Applicant addressed this matter in PD1-011 (ID RR-061-190) and REP2-028 (ID WR-097-113) and anticipates this matter will be resolved with the updated Chapter 11 Marine Mammals (REP4-011) that was submitted at Deadline 4.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		deaths due to physical trauma of unknown cause (n=69) plus the deaths due to physical trauma following probable impact from vessel (n=14), totalling 83, is equivalent to 6.90% of the total necropsies where cause of death was established (n=1203); not the 5.6% presented.										
RI_D27	D27	For clarity, we advise that a single sensitivity is presented for each receptor to the impact pathway. Listing two sensitivities (e.g. Low to Medium for harbour porpoise) is not conducive for a clear assessment. The assessment should be precautionary and so use the worst-case sensitivity.										The Applicant addressed this matter in PD1-011 (ID RR-061-191) and REP2-028 (ID WR-097-114) and considers there is no further action.
RI_D28	D28, D4	The significance of the disturbance impact must be presented for each of the approaches used to determine disturbance distance. Each approach and subsequent assessment of impact significance provides necessary information for		No change.  Potential resolution once Applicants rationale from Rule 9 response is included in a named plan.		In progress. Updates provided at PDA and D1 have not yet been reflected in ES Chapter 11.		No change		No change		The Applicant anticipates this matter will be resolved with the updated Chapter 11 Marine Mammals (REP4-011) that was submitted at Deadline 4.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		<p>Natural England to inform its advice. For example, the magnitude of impact to harbour porpoise using the EDR approach is Medium, which when combined with a Medium sensitivity, leads to a Moderate impact significance which is Significant in EIA terms. Information such as this is currently missing.</p> <p>It is not appropriate to only present the significance of the disturbance impact after population modelling has been undertaken. This also applies to the CEA. We advise that an assessment of cumulative impacts to cetacean species is presented using the approach that generates the worst-case numbers disturbed. The Applicant should not only present the iPCoD modelling results. Present the impact significance for each approach used to determine the disturbance range, using the combination of sensitivity and magnitude (percentage of</p>										

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		reference population within the disturbance range).  Present the cumulative impact significant for each species using the worst-case numbers disturbed i.e. not only the iPCoD modelling results.										
RI_D29	D29	We acknowledge the Applicant's statement that the findings of Graham et al. (2017), i.e. the dose-response relationship for harbour porpoise, should not be extrapolated to other cetacean species. We then query why it has been applied to dolphin species, but not other cetacean species such as minke whale. We suggest that an alternative approach, such as determining a likely effects range from the literature as presented in Appendix 5.2.11.2 Section 6.1.2, would be more appropriate.										The Applicant addressed this matter in PD1-011 (ID RR-061-193) and REP2-028 (ID WR-097-116) and considers there is no further action.
RI_D30	D30	We welcome that the Applicant has undertaken an assessment of the disturbance impact										The Applicant welcomes this response.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		from ADD activation.										
RI_D31	D31	We do not agree that the effect ranges of ADDs will be limited to the (minimum) distance the receptor can swim in the time that the ADD is active. To illustrate, Thompson et al (2020) showed that harbour porpoise had a 50% probability of response within 21.7km after 15 minutes of ADD playback. This highlights that the effects range of ADDs does not only correspond to the duration of the activation.										The Applicant addressed this matter in PD1-011 (ID RR-061-195 and REP2-028 (ID WR-097-118) and considers there is no further action.
RI_D32	D32	In all iPCoD modelling results tables, including those in the CEA, the values in the median impacted as percentage of unimpacted column do not correspond to the unimpacted population mean and impacted population mean. We advise that the applicant present the difference between the two means in each table that displays iPCoD modelling results, and		No change.  The Applicant has justified the assessment methodology they consider most appropriate, but this is not yet reflected in updated ES chapter and both means are still not presented.		In progress. Justification is still not shown in Chapter 11. Both the median and mean are now presented in the technical notes, but are not yet shown in updates to Chapter 11.		No change		No change		The Applicant anticipates this matter will be resolved with the updated Chapter 11 Marine Mammals (REP4-011) that was submitted at Deadline 4.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		provide information to support the value they consider to be most appropriate.										
RI_D33	D33	There are small discrepancies between the Tiers. Natural England's suggested Tiers has 6 levels, not 7. We infer that our suggested Tier 5 has been split into two Tiers (Tiers 5 and 6 presented by the Applicant).										The Applicant addressed this matter in PD1-011 (ID RR-061-197) and REP2-028 (ID WR-097-120) and considers there is no further action.
RI_D34	D34	The Applicant has not used the species-specific Celtic and Greater North Seas (CGNS) MU to screen in projects to the CEA for those relevant species (namely common dolphin, Risso's dolphin, white-beaked dolphin, and minke whale), instead using the smaller Celtic and Irish Seas (CIS) MU. By taking this approach, the cumulative effects of projects in the screening area are likely to affect a subset of the CGNS MU populations, rather than the populations as a whole. Therefore, presenting the numbers impacted										The Applicant addressed this matter and submitted an updated Appendix 11.4 Marine Mammal Cumulative Effects Assessment (CEA) Project Screening (REP1-048) at Deadline 1 (see ID WR-097-121 of REP2-028 for reference) at Deadline 1. The Applicant considers there is no further action.



Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		as a percentage of the whole CGNS MU may downplay the potential significance of this impact. This point should be acknowledged in the assessment.										
RI_D35	D35	The CEA Screening approach has screened projects in or out on the basis of them contributing to disturbance from underwater noise. This approach is not suitable for screening out projects that may act cumulatively through other impact pathways e.g. collision risk.										The Applicant addressed this matter and submitted an updated Appendix 11.4 Marine Mammal CEA Project Screening (REP1-048) at Deadline 1 (see ID WR-097-122 of REP2-028 for reference). The Applicant considers there is no further action.
RI_D36	D36	We do not agree with the Applicant's assumption that all projects with unknown construction timelines will not overlap with the Morecambe construction period. We consider that it would be conservative to assume that construction for consented projects could overlap with the project, if an operational date is known (as presented in Table 4.1 for the projects										The Applicant addressed this matter in PD1-011 (ID RR-061-200) and REP2-028 (ID WR-097-123). The Applicant considers there is no further action.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		listed in Paragraph 53) and is similar to the Morecambe project's operational date.										
RI_D37	D37	Table 4.1 does not list some of the seal MUs used in the screening area (namely MU 1 Southwest Scotland, and the Isle of Man MU). The Applicant should confirm that there are no projects that could act cumulatively in these MUs.										The Applicant addressed this matter in PD1-011 (ID RR-061-201) and REP2-028 (ID WR-097-124) and considers there is no further action.
RI_D38	D38	The Project has identified a residual PTS impact that it has not committed to fully mitigate at this stage. It is not sufficient to say that mitigation for the Project would be put in place post-consent, as this is not secured. Natural England advises that this should be secured as a commitment. The PTS risk of other relevant projects should be assessed cumulatively in the CEA.		No change.		No change. This has not been addressed in technical notes, Chapter 11 or the CEA appendix.		No change		NE notes that this has been considered in a technical note [REP3_061] but still consider residual PTS should be included in the CEA.		The Applicant anticipates this matter will be resolved with the updated Chapter 11 Marine Mammals (REP4-011) which was submitted at Deadline 4 which includes Permanent Threshold Shift (PTS) in the CEA.
RI_D39	D39	There is a discrepancy between the activity types listed here as being screened into the CEA, and that										The Applicant addressed this matter and submitted an updated Chapter 11 Marine Mammals (REP1-030) at Deadline 1 (see ID WR-097-126 of REP2-028 for reference). The Applicant considers there is no further action.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		listed in Table 5.1 of the CEA Screening document. Specifically, the ES Chapter has omitted disturbance from operational windfarms (operational after baseline surveys commenced), but included licenced disposal sites (which is listed as being screened out in the CEA Screening).										
RI_D40	D40	The dose-response curve approach has not been used to determine the number of common dolphin impacted at White Cross. This is contrary to what is stated in Paragraph 11.760. The approach used (TTS) is not sufficiently precautionary for a disturbance impact and is not consistent with how the other projects have been assessed.										The Applicant addressed this matter in PD1-011 (ID RR-061-204) and REP2-028 (ID WR-097-127) and considers there is no further action.
RI_D41	D41	This table presents that, during each piling event at Awel Y Mor OWF, 2,112 harbour porpoise will be affected by PTS but only 83 will be										The Applicant addressed this matter in PD1-011 (ID RR-061-205) and REP2-028 (ID WR-097-128) and submitted an updated Appendix 11.2 Marine Mammal Information and Survey Data at Deadline 1 (REP1-044). The Applicant considers there is no further action.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		<p>disturbed. We consider this improbable, given disturbance occurs over a much larger range than PTS. The Applicant should justify these values.</p> <p>More generally, it would be beneficial for the Applicant to summarise briefly the method used by each project to determine the number of animals affected by PTS and disturbance, for sense-checking.</p>										
RI_D42	D42	<p>SNCBs have not provided formal guidance on an EDR for low order UXO clearance. Such EDRs that have been used for this purpose so far have been agreed on a case-by-case basis only.</p>										<p>The Applicant notes this response. No further action required but noted for the future marine licence application for UXO.</p>
RI_D43	D43	<p>Natural England welcomes the UXO Assessment undertaken. We acknowledge that the assessment is illustrative at this stage as the UXO clearance Marine Licence will be applied for post-consent. We do not expect that additional information will be available to refine</p>										<p>The Applicant welcomes this response.</p>

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		the UXO assessment envelope prior to the application for a Marine Licence. Hence we are content that the UXO assessment does not require further update at this stage.										
RI_D44	D44	The illustrative UXO assessment concludes that UXO clearance activities should not have a significant impact on marine mammal populations so long as appropriate marine mammal mitigation is secured. The Applicant has provided a draft MMMP which contains mitigation options for UXO clearance. Our comments on the MMMP regarding UXO clearance should be addressed.										The Applicant addressed this matter in PD1-011 (ID RR-061-208) and REP2-028 (ID WR-097-131), and has also updated the clarity given around UXO mitigation with the updated noise guidance at Deadline 4 and considers this matter resolved, but noted for the future marine licence application for UXO.
RI_D45	D45, D70	In the piling scenario at a higher strike rate, there is a residual injury impact because the mitigation proposed is insufficient to reduce the impact. The maximum ADD duration provided is 80 minutes, and in		No change.		No change. Not yet addressed in technical notes or updates to Chapter 11.		No change. Detailed comments on NE's position on the UWSMS in Appendix D1.		No change		In line with the latest joint position statement JNCC, Natural England and Cefas, 2025) and the marine noise policy paper (United Kingdom (UK) Government and Defra, 2025), the Applicant has committed to primary or secondary noise reduction measures (e.g. Noise Abatement System (NAS)) and commits to implement NAS for its worst case scenario (i.e., maximum strike rate and maximum hammer energy) and to review the final mitigation requirements based on the final Project design.  The following documents were updated and submitted at Deadline 4 to reflect this change: <ul style="list-style-type: none"> <li>Chapter 11 Marine Mammals (REP4-011)</li> </ul>

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		order to ensure a harbour porpoise was outside the PTS zone the ADD would have to be on for 92 minutes. The Applicant must present an assessment of the residual impact post-mitigation, and from this additional mitigation should be considered such as noise abatement. Alternatively, remove the higher strike rate from the project envelope.										<ul style="list-style-type: none"> <li>Appendix 11.2 Marine Mammal Information and Survey Data (REP4-015)</li> <li>Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment (REP4-017)</li> <li>Outline Underwater Sounds Management Strategy (UWSMS) (REP4-049)</li> <li>Draft Marine Mammal Mitigation Protocol (MMMP) (REP4-027)</li> </ul> <p>Further information on the potential reduction in impact ranges, upon the application of NAS, is submitted as an Appendix to the Outline UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean) alongside this document at Deadline 5. The UWSMS has further been updated in light of discussion with Natural England and ExQ2s regarding the different scenarios where NAS would be required without any further design refinement. The commitment and the agreement of required measures is secured through the UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean ).</p>
RI_D46	D46	The Vessel Traffic Management Plan does not contain any reference to reducing collision risk or disturbance to marine mammals. It is therefore not appropriate to cross-reference that document here as it does not currently provide any marine mammal mitigation.										The Applicant addressed this matter in PD1-011 (ID RR-061-210) and REP2-028 (ID WR-097-133) and submitted an updated Outline Vessel Traffic Management Plan (VTMP) at Deadline 2 (REP2-022). The Applicant considers there is no further action.
RI_D47	D47	The Applicant's quantified approach to collision risk impact does not accurately represent the actual risk of collision to marine mammals from the project alone or		No change.		No change. Further commitments to reduce collision impacts beyond reliance on best practice measures have not been made.		Resolved. Measures to reduce collision impacts will be secured through conditions.				The Applicant welcomes Natural England (NE) confirmation that this matter is resolved.



Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		cumulatively, as it artificially inflates the number at risk. The quantified approach has not, to our best knowledge, been peer reviewed. Relying on best practice measures to reduce the risk of collision in order to conclude no residual effect to marine mammal species from collision risk is insufficient as it is not enforceable. Natural England advises that the Applicant commit to measures to reduce vessel collision.										
RI_D48	D48	Here the Applicant has stated that "Project related vessels transiting to and from the port...[would] endeavour to stay at least 1km from the coast where possible". This distance should be included in the Outline PEMP.										The Applicant submitted an updated Outline Project Environmental Management Plan (PEMP) at Deadline 1 (REP1-054) (see ID WR-097-135 of REP2-028 for reference). The Applicant considers there is no further action.
RI_D49	D49	Natural England highlights that Marine Wildlife Licences are typically applied for less than 1 year prior to piling. Due to financial and design commitments that will have happened										Since the Applicant's response to this matter in ID WR-097-136 of REP2-028, the Applicant has updated the MMMP (Draft Marine Mammal Mitigation Protocol_Rev 04 Clean) and UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean), and level of commitment to mitigation measures, in light of new noise guidance and intends that the mitigation agreed through the MMMP and UWSMS will be such that EPS licencing requirements are also met.  The UWSMS has further been updated in light of discussion with Natural England and ExQ2s regarding

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		<p>prior to this licence application, the options for implementing further mitigation will be comparatively limited. Committing to mitigation now will ensure that it can be taken into account in the design and financial decisions. Hence we strongly advise that the Applicant commit to undertaking mitigation measures such as noise abatement now.</p> <p>We also highlight that the Applicant must demonstrate that certain EPS licencing tests are met in order to be granted an EPS licence, and that one of these test is to demonstrate that there are “no satisfactory alternatives,” which includes mitigation options.</p>										the different scenarios where NAS would be required without any further design refinement. The commitment and the agreement of required measures is secured through the UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean).
RI_D50	D50	The Applicant does not appear to have presented the number of animals impacted from all cumulative disturbance pathways (piling at other OWFs; construction activities (other than piling) at other		No change.		In progress. Updates including all cumulative disturbance pathways are supplied in the technical note, but are not yet reflected in updates to Chapter 11.		No change		No change		The Applicant anticipates this matter will be resolved with the updated Chapter 11 Marine Mammals (REP4-011) which was submitted at Deadline 4.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		OWFs; other industries and activities). This combined disturbance impact should be presented. Present the combined cumulative effect of disturbance from underwater noise, across the three pathways that are currently assessed only separately.										
RI_D51	D51, D72	Only piling impacts from other OWFS are considered as a cumulative impact for disturbance. Natural England therefore cannot agree with the conclusion in Table 11.108 and advises that other sources of disturbance to marine mammals should be considered in this assessment. We further advise that the applicant should commit to measures to reduce temporal overlap with other activities to ensure that cumulative disturbance impacts are sufficiently mitigated. A standalone vessel code of conduct should be secured as a consent condition,		No change.		No change. Commitment to use of NAS not secured. Underwater Sound Management Strategy has not yet been provided. Vessel code of conduct has not been provided.		In progress: Updates to the VTMP have been made, however the applicant has not considered cumulative disturbances to marine mammals or made a commitment to reduce temporal overlap.		No change		Given the best practice measures listed in the VTMP and PEMP it is not considered that a commitment to further measures are required, noting that all Irish Sea Round 4 projects have identified the same measures and it is not considered further mitigation or coordination of activities is required.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		for all project phases, and contain appropriate measures for marine mammal mitigation. Natural England requests to be consulted on the code of conduct.										
RI_D52	D52	The Applicant should provide evidence to support their statement that other offshore projects and industries would follow similar best practice measures (other than OWF).										The Applicant addressed this matter in PD1-011 (ID RR-061-216) and REP2-028 (ID WR-097-139) and considers there is no further action
RI_D53	D53	We consider that cumulative effect 6: assessment of disturbance from operational offshore turbines generators could have been included in the cumulative effect 1: disturbance from underwater noise assessment. Indeed it should be included in the combined assessment of cumulative effect 1.										The Applicant addressed this matter in PD1-011 (ID RR-061-217) and REP2-028 (ID WR-097-140) and considers there is no further action.
RI_D54	D54	The scope of the OPEMP with regards to marine mammals appears appropriate. However, please see our comments on other aspects of the assessment										The Applicant has reflected disturbance measures from the PEMP (REP3-041) into the Outline VTMP (REP3-047) and has not identified the requirements for further measures or updates to the PEMP.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		and mitigation, which may be relevant to the content of the OPEMP regarding marine mammals. Where changes are made to other documents, they should also be made in the OPEMP.										
RI_D55	D55	<p>Natural England considers that there is insufficient evidence provided to agree with the EIA assessment conclusions, on the following matters:</p> <ul style="list-style-type: none"> <li>- Aspects of the seal baseline</li> <li>- Some of the sensitivities used</li> <li>- The project-alone assessment of disturbance from piling</li> <li>- Residual PTS risk</li> <li>- Aspects of the assessment of collision risk</li> <li>- The assessment of cumulative disturbance</li> </ul> <p>Some of these concerns stem from insufficient mitigation of the impact pathway. Points 3 to 6 can be addressed by securing further mitigation at this</p>										<p>The Applicant addressed this matter in PD1-011 (ID RR-061-219) and REP2-028 (ID WR-097-142). Further to this, the Applicant has also committed to primary and/or secondary noise reduction measures (e.g. NAS) and commits to implement NAS for its worst-case scenario (i.e., maximum hammer strike rate and maximum hammer energy) and to review the final mitigation requirements based on the final Project design.</p> <p>Further information on the potential reduction in impact ranges, upon the application of NAS, is submitted as an Appendix to the Outline UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean) alongside this document at Deadline 5. The UWSMS has further been updated in light of discussion with Natural England and ExQ2s regarding the different scenarios where NAS would be required without any further design refinement. The commitment and the agreement of required measures is secured through the UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean).</p>

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		application stage. See recommended actions for the specific comments underpinning each of these areas of disagreement.										
RI_D56	D56	Natural England considers that all relevant SACs with marine mammal features in English waters have been screened in. We also agree that the key impact pathways have been identified.										The Applicant welcomes this response.
RI_D57	D57	Please note that it is Natural England's remit to provide advice on the assessment in so much as it relates to SACs in English waters. We defer to the relevant SNCBs on the appropriate approach for assessing SACs outside English waters.										The Applicant notes this response.
RI_D58	D58	For clarity, we agree with the Applicant's assessment that there would be no adverse effect on integrity of the Bristol Channel Approaches SAC from the project alone.  We do not necessarily agree with the terminology used										This matter was addressed and an updated Report to Inform Appropriate Assessment (RIAA) was resubmitted at Deadline 1 (REP1-012). This matter is considered resolved.



Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		by the Applicant when they state that "there would be no LSE on the harbour porpoise CIS MU population", as the CIS MU population is not the designated SAC feature, and this conclusion takes into account mitigation.										
RI_D59	D59	The Applicant has used a distance of 4km for their assessment of harbour porpoise disturbance during non-piling construction activities. However, the 4km distance, from Benhemma-Le Gall et al. (2021) is based only on harbour porpoise responses to non-piling construction vessels, rather than other noisy activities (such as cable installation and protection). The Applicant has not presented evidence to demonstrate that 4km is appropriate or precautionary for other noisy activities.										The Applicant addressed this matter in PD1-011 (ID RR-061-223) and REP2-028 (ID WR-097-146) and considers there is no further action.
RI_D60	D60	Natural England's comments on the CEA are also relevant to the HRA in-		No change.		In progress. Updated information on cumulative assessment is		No change		No change		The Applicant anticipates this matter will be resolved with the updated Chapter 11 Marine Mammals (REP4-011) which was submitted at Deadline 4. An updated RIAA was also submitted at Deadline 4 (REP4-009).

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		combination assessments. Changes to the CEA should be reflected in the in-combination assessment also. Further mitigation to reduce impacts to the marine mammal populations would also reduce the risk of an impact to English marine mammal SACs in the region.				applied to the HRA in the technical note, but this is not yet reflected in an update to the HRA screening/RIAA. NE will comment further once these changes have been propagated.						
RI_D61	D61	The IPMP should identify monitoring that seeks to validate areas of the marine mammal assessment where assumptions have been made with high uncertainty or low confidence. Marine mammal monitoring should be undertaken in addition to the standard monitoring of underwater noise generated from the piling of the first four piles. Further detailed discussion of this is required in the monitoring plans. See Natural England's Best Practice Advice for requirements.		No change.		No change as no update to IPMP has been provided.		No change		In progress. The IPMP [REP3_046] now includes a requirement to include marine mammal monitoring with planned ornithological aerial surveys, but there is still no commitment to monitor marine mammal responses to impacts.		The Applicant has further considered the request for monitoring and has updated the In Principle Monitoring Plan (IPMP) (REP4-025) to include winter aerial surveys for Red Throated Diver which also provides a means to provide information on marine mammal presence and densities, particularly gathering further insight on the high numbers of harbour porpoise seen in the baseline surveys. No further monitoring is considered to be required.
RI_D62	D62	The Applicant should clarify how it will be secured that the final UXO										The Applicant addressed this matter in PD1-011 (ID RR-061-226) and REP2-028 (ID WR-097-149) and considers there is no further action.

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		MMMP will be developed in accordance with the Draft MMMP.										
RI_D63	D63	<p>It is not clear whether the High Order section of the table takes into account the reduction in source level through the use of a bubble curtain. When finalising the UXO MMMP post-consent, clearly state whether noise reduction has been factored into the modelling and so impact ranges.</p> <p>Note, it would be beneficial to present both (unabated and abated noise levels at ranges/PTS and TTS distances), for comparison to underwater noise monitoring results.</p>										The Applicant addressed this matter in PD1-011 (ID RR-061-227) and REP2-028 (ID WR-097-150) and considers there is no further action, but is noted for the future marine licence application for UXO clearance if required.
RI_D64	D64	The Applicant has not provided the anticipated duration of the ADD activation during UXO clearance. An illustrative example of ADD duration, based on the PTS ranges presented, would be beneficial.										The Applicant addressed this matter in PD1-011 (ID RR-061-228) and REP2-028 (ID WR-097-151) and considers there is no further action.
RI_D65	D65	The Applicant has not committed to several mitigation										The Applicant addressed this matter in PD1-011 (ID RR-061-228) and REP2-028 (ID WR-097-152) and considers there is no further action

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		measure options, instead saying that they will be implemented "if required". This increases the uncertainty about what measures will be undertaken during UXO clearance, and so complicates the worst-case scenario (i.e. what the minimum mitigation is that will be implemented). Examples include:  - Avoidance or relocation of UXO - Bubble curtain usage - Passive Acoustic Monitoring										
RI_D66	D66	The final piling MMMP should present the injury ranges based on SPL also, as those distances correspond to the necessary size of the mitigation zone. When finalising the piling MMMP post-consent, present the injury ranges based on instantaneous PTS.										The Applicant addressed this matter in PD1-011 (ID RR-061-230) and REP2-028 (ID WR-097-153) and considers this matter resolved, but noted for the finalisation process of the MMMP.
RI_D67	D67	The Applicant should clearly state the precise mitigation measures that are being relied upon		No change.		No change.		No change. It is still unclear which measures will be delivered to mitigate for		No change.		In line with the latest joint position statement JNCC, Natural England and Cefas, 2025) and the marine noise policy paper (UK) Government and Defra, 2025), the Applicant has committed to primary or secondary noise reduction measures (e.g. NAS) and commits to implement NAS for its worst case scenario (i.e.,

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		to conclude no adverse effect from impact pathways covered in the ES. The current mitigation measure options outlined in Paragraph 90 increase the uncertainties around which measures will be used during piling and therefore complicates the worst-case scenario (i.e. what the minimum mitigation is that will be implemented).						the WCS as the UWSMS indicates review of further refinements in design prior to determining the level of mitigation needed.				<p>maximum strike rate and maximum hammer energy) and to review the final mitigation requirements based on the final Project design.</p> <p>The following documents were updated and submitted at Deadline 4 to reflect this change:</p> <ul style="list-style-type: none"> <li>Chapter 11 Marine Mammals (REP4-011)</li> <li>Appendix 11.2 Marine Mammal Information and Survey Data (REP4-015)</li> <li>Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment (REP4-017)</li> <li>Outline UWSMS (REP4-049)</li> <li>Draft MMMP (REP4-027)</li> </ul> <p>Further information on the potential reduction in impact ranges, upon the application of NAS, is submitted as an Appendix to the Outline UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean) alongside this document at Deadline 5. The UWSMS has further been updated in light of discussion with Natural England and ExQ2s regarding the different scenarios where NAS would be required without any further design refinement. The commitment and the agreement of required measures is secured through the UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean).</p>
RI_D68	D68	The break procedure outlined here, for piling breaks between 10 minutes and 2 hours, does not adhere to the JNCC piling mitigation guidelines. Revise the break procedure in the draft MMMP.		No change.		No change. No updates to the IPMP or MMMP have been provided.		No change. The proposed change to the break procedure still does not adhere to the JNCC guidance.		No change		<p>The draft MMMP was updated with the following text at Deadline 4 (REP4-027):</p> <p><i>"The final protocol for breaks in piling will be agreed during the finalisation of the MMMP through consultation alongside the Project final design and considering mitigation measures applied. It is noted that the current JNCC guidance (2010) requires soft start procedures to be re-established after a break longer than 10 minutes, however this does not consider noise reduction methods and there may be new guidance available at the time the MMMP is updated post-consent (noting the aim to reduce the overall piling duration)."</i></p> <p>It is considered that the final agreement of the breaks in piling is to be appropriately agreed post consent in line with latest guidance and in view of the final Project design and mitigation applied. This has been discussed with, and acknowledged by, Natural England and the MMO and the Applicant expects feedback on the approach at Deadline 5 and that the matter can be resolved by the end of examination (with wording agreed in the final submission of the MMMP at Deadline 6 as required).</p>
RI_D69	D69	We query the reliability of PAM in										The Applicant addressed this matter in PD1-011 (ID RR-061-209) and REP2-028 (ID WR-097-156).

Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		detecting all species in the project area, particularly minke whales and seals. We advise that the more precautionary approach would be to delay start up of piling until conditions allow for visual monitoring.										
RI_D70	D70	The Applicant's outlined approach of activating the ADD for 80 minutes is insufficient to ensure that harbour porpoise will be outside the injury zone (based on PTS from SELcum) during piling. Further mitigation is therefore required to reduce the risk of injury to harbour porpoise. We do not agree that the proposed approach is sufficient for all species. Commit to further mitigation, e.g. the use of noise abatement systems, to ensure that the risk of injury to harbour porpoise is reduced as far as possible.										<p>In line with the latest joint position statement JNCC, Natural England and Cefas, 2025) and the marine noise policy paper (UK) Government and Defra, 2025), the Applicant has committed to primary or secondary noise reduction measures (e.g. NAS) and commits to implement NAS for its worst case scenario (i.e., maximum strike rate and maximum hammer energy) and to review the final mitigation requirements based on the final Project design.</p> <p>The following documents were updated and submitted at Deadline 4 to reflect this change:</p> <ul style="list-style-type: none"> <li>• Chapter 11 Marine Mammals (REP4-011)</li> <li>• Appendix 11.2 Marine Mammal Information and Survey Data (REP4-015)</li> <li>• Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment (REP4-017)</li> <li>• Outline UWSMS (REP4-049)</li> <li>• Draft MMMP (REP4-027)</li> </ul> <p>Further information on the potential reduction in impact ranges, upon the application of NAS, is submitted as an Appendix to the Outline UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean) alongside this document at Deadline 5. The UWSMS has further been updated in light of discussion with Natural England and ExQ2s regarding the different scenarios where NAS would be required without any further design refinement (Outline Underwater Sound Management Strategy_Rev 03 Clean). The commitment and the agreement of required measures is secured through the UWSMS (Outline Underwater Sound Management Strategy_Rev 03 Clean ).</p>
RI_D71	D71	It is not appropriate for the MMMP to contain measures aimed at reducing										



Point	Point Number(s) from Appendix D	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix D - Marine Mammals	RAG Status Rel Rep D1	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG status D3	Update Following D3	RAG status D4	Applicant Response at Deadline 5
		the cumulative noise effects across multiple projects. A more appropriate place for these measures would be an underwater sound management strategy. See other comments on underwater sound management strategy.										

## 2.6 Marine Geology, Marine Sediment and Water Quality

Table 2.7 The Applicant's comments on NE's Risk and Actions Log: Marine Geology, Marine Sediment and Water Quality

Point	Point Number(s) from Appendix E	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix E - Marine Geology, Physical Processes, Sediment and Water Quality	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG Status D3	Update following D3	RAG status D4	Applicant Response at Deadline 5
RI_E7	E7	We advise that further detail is required in the project description to inform the Maximum Design Scenario (MDS) and Environmental Impact Assessment (EIA).										The Applicant has previously addressed this matter with an updated Chapter 7 Marine Geology, Oceanography and Physical Processes (REP2-008), Chapter 8 Marine Sediment and Water Quality (REP2-010) and considers there is no further action.
RI_E8	E8, F7	Cable and pipeline crossings. More specific information is required on the maximum volume figures used for cable/pipeline crossings: it should be clear whether this volume refers to the amount of cable protection material to be placed, or a broader overall volume for the crossings. Information on the location of these crossings should also be provided, in accordance with Natural England's best practice guidance for cabling.		In progress. Locations and figures still to be secured in named plans and DCO		No change		No change.		NE acknowledges that quantities of cable protection for different elements of the project is provided in the relevant plan, but locations of cable crossings are not so best practice guidance has not been followed. Therefore, our advice remains unchanged. However, For this project we recognise that whilst there may be an impact on sensitive receptors, these are not designated site features		The Applicant notes this response, and reiterates that the layout and therefore cable crossings would be developed post consent.

Point	Point Number(s) from Appendix E	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix E - Marine Geology, Physical Processes, Sediment and Water Quality	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG Status D3	Update following D3	RAG status D4	Applicant Response at Deadline 5
										allowing for a risk based decision to be made. We therefore do not anticipate further progress on this issue.		
RI_E9	E9	Natural England agrees that the baseline description of physical processes through the desktop review of existing literature and existing data sources, project specific surveys and numerical modelling baseline scenarios are sufficient to appropriately characterise the study area.										The Applicant welcomes this response.
RI_E15		Natural England is content that monitoring of effects on physical processes will be captured during pre and post construction multibeam echo sounder (MBES) and side scan sonar (SSS) surveys to document bedform topography as per [APP-148]. These surveys should be										The Applicant welcomes this response.

Point	Point Number(s) from Appendix E	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix E - Marine Geology, Physical Processes, Sediment and Water Quality	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG Status D3	Update following D3	RAG status D4	Applicant Response at Deadline 5
		secured in the IPMP.										
RI_E10	E10	Natural England agrees with the numerical modelling approach and scenarios conducted in relation to hydrodynamics, waves and sediment transport to inform the potential changes in the Morecambe Generation physical processes study area arising from the construction, operation and decommissioning.										The Applicant welcomes this response.
RI_E11	E11, F9	Seabed preparation activities (UXO and boulder clearance) have not been included in the assessment of impacts to physical processes or water quality. Natural England advises that physical process, marine sediment and water quality impacts due to UXO clearance and boulder clearance should be considered and assessed within an updated ES. Without consideration of these activities,		In progress. Rule 9 response presents updated worst case scenario that clarifies and includes these pressures and receptors, but this is not yet included in an updated assessment.		No change		In progress: UXO assessment is now included in updated ES chapter. The maximum charge weight of 700kg does not follow NE best practice guidance (see also comment RI_D12) but in this instance we do not believe it will make a material		No change. Boulder clearance is within the scope of the overall width of disturbance used for assessments but it is not clear where and how cleared boulders are to be deposited. UXO component of this issue is considered to be resolved.		The Applicant welcomes confirmation that the Unexploded Ordnance (UXO) component of this matter is resolved. With regard to boulder clearance, in the event boulders are encountered during construction, this would likely be undertaken by a 'clam shell grab' that would lift and move any boulders encountered aside, but within the seabed preparation areas allowed for Wind Turbine Generator (WTG)/Offshore Substation Platforms (OSPs) and inter-array and platform link cables. The Applicant maintains that, given the low prevalence of boulders found during initial geophysical surveys at the Project windfarm site, an assessment of boulder clearance is encompassed within the seabed disturbance assessments undertaken in Chapter 9 Benthic Ecology (Impact 1: Physical disturbance and loss of benthic habitat' in Section 9.6.3.1 of Chapter 9 Benthic Ecology (REP3-014). This matter has been discussed with Natural England and the Applicant expects the matter can be resolved.

Point	Point Number(s) from Appendix E	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix E - Marine Geology, Physical Processes, Sediment and Water Quality	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG Status D3	Update following D3	RAG status D4	Applicant Response at Deadline 5
		there is insufficient information to assess impacts to these receptors.						difference to the outcome of the assessment. Boulder clearance has not been addressed in the updated ES chapter, so this issue cannot yet be resolved.				
RI_E13	E13, F11	Whilst a commitment is made to implementing mitigation measures, these are not yet secured within the DCO/dML and so it cannot be confirmed how effected they will be.		No change. The Schedule of Mitigation indicates the means by which meaures would be secured in the DCO/dML, but does not secure commitment to any given level of mitigation. See also comment A8		No change		No change. We note that the Schedule of Mitigation and DCO/dML have been updated regarding other Risks and Issues but this issue has not been addressed.		No change.		The Applicant has submitted an updated Schedule of Mitigation (REP4-021) and Commitments Register (REP4-047) at Deadline 4 to demonstrate the means by which each mitigation is secured. An Outline Construction Method Statement (CMS) (REP4-056) was also submitted at Deadline 4 to further demonstrate where each mitigation is secured for relevant topics. Where mitigation is a commitment to consider, it is not relied upon for the conclusions of the ES or RIAA, rather a consideration of opportunity to further reduce non-significant effects.
RI_E14	E14, F12b	Natural England notes that the Applicant is proposing to leave scour and cable protection in-situ. We advise that regardless of legislation or being outside of designated sites, the Applicant should aim to remove		No change. The Applicant committed to providing the outline decommissioning plan during consenting.		No change		No change.		No change.		As per the Applicant's response in ID WR-097-166 of REP2-028, the Applicant does not consider that an outline version of a Decommissioning Programme is required to be submitted pre-consent. During the post-consent stage when more accurate details of the Project design are known, a decommissioning programme can be prepared based on those details. The Applicant would also note that Guidance for industry <sup>1</sup> issued by the Department for Business, Energy and Industrial Strategy in 2019, decommissioning of offshore renewable energy installations under the energy act 2004, sets out the framework for the content of the Decommissioning Programme.

<sup>1</sup> [https://assets.publishing.service.gov.uk/media/5f5b2724e90e0718e212a22d/decommissioning-offshore-renewable-energy-installations-energy-act-2004-guidance-industry\\_\\_1\\_.pdf](https://assets.publishing.service.gov.uk/media/5f5b2724e90e0718e212a22d/decommissioning-offshore-renewable-energy-installations-energy-act-2004-guidance-industry__1_.pdf)

Point	Point Number(s) from Appendix E	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix E - Marine Geology, Physical Processes, Sediment and Water Quality	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG Status D3	Update following D3	RAG status D4	Applicant Response at Deadline 5
		<p>infrastructure. Decommissioning should aim to remove infrastructure to avoid irreversible (permanent) habitat loss, thus returning the seabed habitat to its pre-developed baseline status as required by OSPAR. Natural England advises that the Applicant considers using scour and cable protection which is more readily removable at the time of decommissioning. We would welcome and encourage this to be secured as a commitment.</p> <p>Ideally this would also be included in an Outline Decommissioning Plan submitted to support the consenting phase. We highlight that it is a requirement to prepare a decommissioning programme under Section 105 of the Energy Act 2004.</p>										<p>The Applicant is also aware of the emerging need for the industry to plan for decommissioning given the age of some of the UK's oldest offshore wind farms. Recent guidance from the UK Offshore Energies Association (Designing for Decommissioning of Offshore Wind, 2024) is a useful but early guide to help developers (and stakeholders) understand and navigate the process. Further emerging guidance and experience from wind farms ahead of Morecambe in their decommissioning will be included within any final decommissioning programme.</p> <p>The Applicant will continue to engage with NE on this matter but the Applicant is unlikely to agree this through the Examination.</p>



## 2.7 Benthic Ecology

Table 2.8 The Applicant's comments on NE's Risk and Actions Log: Benthic Ecology

Point	Point Number(s) from Appendix F	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix F - Subtidal Benthic Ecology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG Status D3	Update following D3	RAG status D4	Applicant Response at Deadline 5
RI_F6	F6	We advise that further detail is required in the project description to inform the Maximum Design Scenario (MDS) and Environmental Impact Assessment (EIA). Please see detailed comments in relevant headings of this table.										The Applicant has addressed this matter with an updated Chapter 9 Benthic Ecology (REP2-012) at Deadline 2 and considers this matter resolved.
RI_F7	F7	<p>Cable/pipeline crossings – Natural England notes that information pertaining to cable protection volumes for cable/pipeline crossings is unclear.</p> <p>In [MOR001-FLO-CON-ENV-RPT-1050] paragraph 5.73 notes that "Cable protection would be required at the crossings (and is additional to the cable protection requirements set out in Table 5.12)". Table 5.13 sets out the cable/pipeline crossings design envelope and includes maximum cable/pipeline crossing volume per crossing (m3), and maximum cable/pipeline crossing volume for all crossings (m3). However, it is not explicit that these volumes relate to cable protection. Additionally, there is</p>		<p>Commentary for this issue is now amalgamated with RI_E8 in Tab E as this is the same issue. Further updates will be addressed there.</p>								The Applicant has responded to this matter above in <b>Table 2.7</b> (RI_E8).

Point	Point Number(s) from Appendix F	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix F - Subtidal Benthic Ecology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG Status D3	Update following D3	RAG status D4	Applicant Response at Deadline 5
		no information on location of crossings. It would be helpful if these could be provided and updated in the final ES.										
RI_F8	F8	Natural England agrees that the data included in the baseline characterisation for benthic ecology is sufficient to characterise the study area. Therefore, unless there is a change in the project design parameters, we will provide no further comment on the data during examination.										The Applicant welcomes this response.
RI_F9	F10	Natural England agrees with the approach and scenarios conducted to inform the potential changes in the Morgan Generation benthic ecology study area arising from the construction, operation and decommissioning.  Therefore, we advise that unless there are significant changes to project design parameters, we will provide no further comment on data during examination.										The Applicant welcomes this response.
RI_F10	F9	Seabed preparation  Natural England notes that Unexploded Ordnance (UXO) clearance has not been considered for impacts in [APP-046]		Commentary for this issue is now amalgamated with RI_E11 in Tab E as this is the same issue. Further								The Applicant has responded to this matter above in <b>Table 2.7</b> (RI_E11).

Point	Point Number(s) from Appendix F	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix F - Subtidal Benthic Ecology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG Status D3	Update following D3	RAG status D4	Applicant Response at Deadline 5
		<p>on the basis that UXO clearance activities for the Project would be considered as part of a separate licence application. UXO clearance can lead to pressures such as abrasion/disturbance of the substrate on the surface of the seabed, changes in suspended solids, smothering etc.</p> <p>In addition, there appears to be no consideration given to boulder clearance activities. And it is unclear whether boulder clearance will be required. However, to have confidence in assessments of benthic ecology impacts it is important to understand these requirements and provide assessments for activities if they are to take place.</p> <p>We advise that the Application should provide sufficient information to assess the potential impacts from seabed preparation.</p>		updates will be addressed there.								
RI_F11	F11	Natural England advises that it is key that all mitigation measures are secured in any consent issued. Whilst we understand there is a commitment to implementing them, it cannot be fully understood at this stage the level of mitigation some		Commentary for this issue is now amalgamated with RI_E13 in Tab E as this is the same issue. Further updates will be addressed there.								The Applicant has responded to this matter above in <b>Table 2.7</b> (RI_E13).

Point	Point Number(s) from Appendix F	Taken from Natural England's Relevant and Written Representations Morecambe Generation Appendix F - Subtidal Benthic Ecology	RAG Status Rel Rep	Update Following Procedural Deadline A	RAG Status D1	Update Following D1	RAG status D2	Update Following D2	RAG Status D3	Update following D3	RAG status D4	Applicant Response at Deadline 5
		measures may be able to provide.										
RI_F12	F12	<p>F12a: Long term degradation of plastic based geotextile bags has the potential to release plastics into the environment. Consideration should be given to use of novel technologies such as rock bags, and to removing plastics from the site after use.</p> <p>F12b: Natural England notes that the Applicant is proposing to leave scour and cable protection in-situ. We advise that regardless of legislation or being outside of designated sites, the Applicant should aim to remove infrastructure. Decommissioning should aim to remove infrastructure to avoid irreversible (permanent) habitat loss, thus returning the seabed habitat to its pre-developed baseline status as required by OSPAR.</p>		<p>F12a: In progress. Use of non-plastic technologies will be given consideration by the Applicant. This should be reflected by a commitment in the Schedule of Mitigation to measures to reduce impacts to the wider environment including but not restricted to alternatives to plastic use.</p> <p>F12b: Scour and cable protection commentary is now amalgamated with RI_14 in Tab E as this is the same issue. Further updates will be addressed there. This row will only be used for further updates and comments on F12a</p>		No change.		No change, Schedule of Mitigation has been updated but did not address this issue.		No change.		<p>The Applicant acknowledges NEs concerns and in response has submitted an updated Schedule of Mitigation (REP4-021) and Commitments Register (REP4-047) to commit to considering non-plastic scour protection options at the time the design is progressed post-consent. This was also detailed in an Outline Construction Method Statement (CMS) at Deadline 4 (REP4-056). This mitigation is not considered to be relied upon however for the conclusions of the ES or RIAA.</p>

2.8    **Bats**

Table 2.9 The Applicant’s comments on NE’s Risk and Actions Log: Bats

Point	NE Comment	RAG Status D3	Updated following D3	RAG status D4	Applicant Response at Deadline 5
RI_I1	Natural England does not agree with the Applicants conclusion that there is no impact pathway for bats. The Applicant should review the available evidence on bat species where crossing of the Irish Sea is known to have occurred and present findings as to the expected magnitude of effect from this pathway. Evidence sources that could inform this work have been indicated by NE in response to ExQ 1HRA3.		No change		The Applicant acknowledges Natural England’s concerns regarding impacts to bats. Therefore, a Technical Note on the Assessment of Offshore Impacts on Bats over the Irish Sea was submitted at Deadline 4 (REP4-055).

### 3 References

NCC, Natural England and Cefas (2025). JNCC, Natural England and Cefas position on the use of quieter piling methods and noise abatement systems when installing offshore wind turbine foundations. Available at: <https://hub.jncc.gov.uk/assets/e1d38ce8-9bc6-4fb5-b867-f7f595caa25a>. Accessed 3<sup>rd</sup> February 2025.

UK Government (2025). Policy paper - Reducing marine noise. Published 21 January 2025. Available at: <https://www.gov.uk/government/publications/reducing-marine-noise/reducing-marine-noise>. Accessed 3<sup>rd</sup> February 2025.