

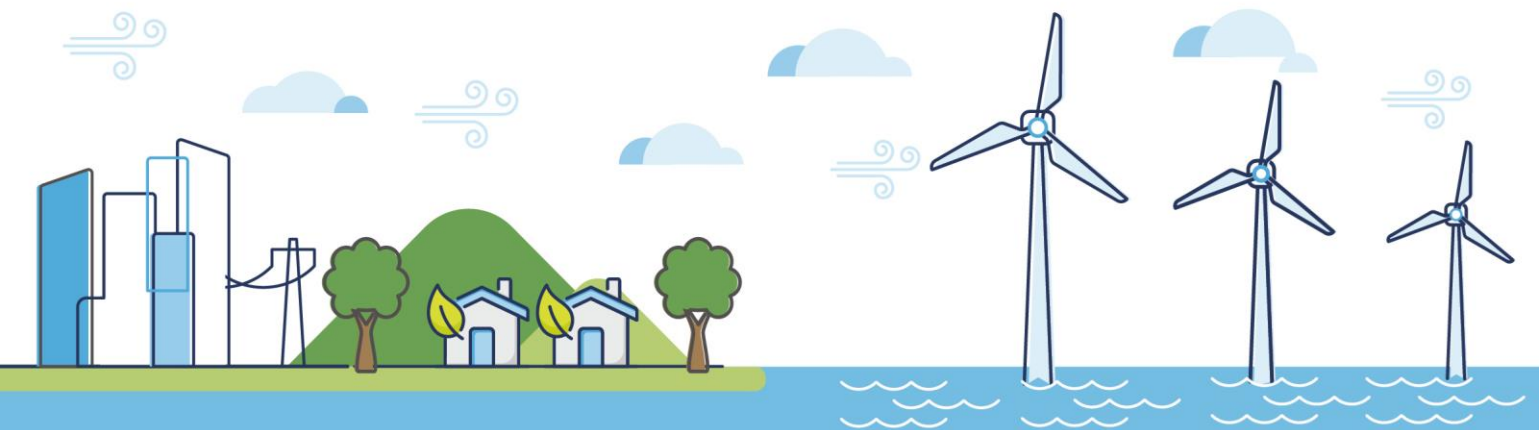
Morecambe Offshore Windfarm: Generation Assets Examination Documents

Volume 9

The Applicant's Comments on Deadline 2 Submissions by Interested Parties

Document Reference: 9.42

Rev 01



Document History

Doc No	MOR001-FLO-CON-ENV-NOT-0017	Rev	01
Alt Doc No	n/a		
Document Status	Approved for Use	Doc Date	22 January 2025
PINS Doc Ref	9.42	APFP Ref	n/a

Rev	Date	Doc Status	Originator	Reviewer	Approver	Modifications
01	22 January 2025	Approved for Use	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a

Contents

1	Introduction	11
2	Responses to Deadline 2 submissions.....	11
2.1	Maritime and Coastguard Agency (REP2-034)	12
2.2	Marine Management Organisation (REP2-035)	20
2.3	Natural England (REP2-037).....	100
2.4	NatureScot (REP2-039)	131
2.5	Ørsted (REP2-040).....	142
2.6	Spirit Energy (REP2-042)	148
3	References	150

Tables

Table 2.1 The Applicant's response to the Maritime and Coastguard Agency Deadline 2 submission (REP2-034)	12
Table 2.2 The Applicant's comments on the MMOs Deadline 2 submission (REP2-035)	20
Table 2.3 The Applicant's comments on Table 1 in MMOs Deadline 2 submission (REP2-035)	36
Table 2.4 The Applicant's comments on Natural England's Deadline 2 submission (REP2-037)	100
Table 2.5 The Applicant's response to Natural England's Annex 1 table ("Natural England's Response to the Applicant's Documents Submitted at Deadline 1 Relevant to our Remit)	128
Table 2.6 The Applicant's comments on the NatureScot's Deadline 2 submission (REP2-039)	131
Table 2.7 The Applicant's comments on Ørsted's Deadline 2 submission (REP2-040)	142
Table 2.8 The Applicant's comments on Spirit Energy's Deadline 2 submission (REP2-042)	148

Glossary of Acronyms

AEOI	Adverse Effect on Integrity
AEoSI	Adverse Effect on Site Integrity
AIS	Automatic Identification System
ALARP	As Low As Reasonably Practicable
BDMPS	Biologically Defined Minimum Population Scales
CEA	Cumulative Effects Assessment
COLREG	International Convention for Preventing Collisions at Sea
CRM	Collision Risk Modelling
CRNRA	Cumulative Regional Navigation Risk Assessment
DAS	Digital Aerial Survey
DCO	Development Consent Order
DEP/SEP	Dudgeon Extension Project/Sheringham Extension Project
dML	Deemed Marine Licence
DSC	Digital Selective Calling
eDNA	Environmental Deoxyribonucleic Acid
EIA	Environmental Impact Assessment
EMF	Electro Magnetic Field
EN-1	National Policy Statement for Energy
EN-3	National Policy Statement for Renewable Energy Infrastructure
ERCoP	Emergency Response Co-operation Plan
ES	Environmental Statement
EUNIS	European Nature Information System
ExA	Examination Authority
GPS	Global Positioning System
HAZID	Hazard Identification
HRA	Habitats Regulations Assessment
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IFR	Instrument Flying Rules
IP	Interested Parties
IPMP	In Principle Monitoring Plan
IoM TSC	Isle of Man Territorial Sea Committee
ITU	International Telecommunications
JNCC	Joint Nature Conservation Committee

LBBG	Lesser Black-Backed Gull
MCA	Maritime and Coastguard Agency
MCZ	Marine Conservation Zone
MDE	Marine Data Exchange
MEDIN	Marine Environmental Data and Information Network
MGN	Marine Guidance Note
MMMP	Marine Mammal Mitigation Protocol
MMO	Marine Management Organisation
MPA	Marine Protected Area
NE	Natural England
NRA	Navigation Risk Assessment
NRW	Natural Resources Wales
ORJIP	Offshore Renewables Joint Industry Programme
OSP	Offshore Substation Platform
OWEC	Crown Estate's Offshore Wind Evidence and Change
OWF	Offshore Windfarm
PCM	Post-Consent Monitoring
PEIR	Preliminary Environmental Information Report
PINS	Planning Inspectorate
POSEIDON	Planning Offshore Wind Strategic Environmental Impact Decisions
PVA	Population Viability Analysis
RAG	Red, Amber, Green
RIAA	Report to Inform Appropriate Assessment
RIES	Report on the Implications for European Sites
RSPB	The Royal Society for the Protection of Birds
RTD	Red Throated Diver
SAR	Search and Rescue
SNCBs	Statutory Nature Conservation Bodies
SoCG	Statement of Common Ground
SOLAS	Safety of Life at Sea Convention
SPA	Special Protection Areas
SSSI	Site of Special Scientific Interest
UK	United Kingdom
UKHO	United Kingdom Hydrographic Office
UXO	Unexploded Ordnance
VHF	Very High Frequency

WTG	Wind Turbine Generator
WT	Wood Thilsted
WWT	Wildfowl and Wetlands Trust

Glossary of Unit Terms

km	kilometre
km ²	square kilometre
m	metre
m ³	cubic metre
nt	nanotesla

Glossary of Terminology

Agreement for Lease (AfL)	Agreements under which seabed rights are awarded following the completion of The Crown Estate tender process.
Applicant	Morecambe Offshore Windfarm Ltd
Application	This refers to the Applicant's application for a Development Consent Order (DCO). An application consists of a series of documents and plans which are published on the Planning Inspectorate's (PINS) website.
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).
The Planning Inspectorate	The agency responsible for operating the planning process for Nationally Significant Infrastructure Projects.
Windfarm site	The area within which the WTGs, inter-array cables, OSP(s) and platform link cables would be present.



The future of renewable energy

A leading developer in Offshore Wind Projects

1 Introduction

1. This document presents the Applicant's comments on Deadline 2 submissions received from the following Interested Parties (IP) at Deadline 2:
 - Maritime and Coastguard Agency (MCA) (REP2-034)
 - Marine Management Organisation (MMO) (REP2-035)
 - Natural England (NE) (REP2-037)
 - NatureScot (REP2-039)
 - Ørsted (REP2-040 and REP2-041)
 - Spirit Energy (REP2-042)
2. The Applicant has further responded to Spirit Energy's Deadline 1 submissions in the following documents, submitted alongside this document at Deadline 3:
 - 9.43.1 Remaining Responses from the Applicant's to Spirit Energy Deadline 1 Submissions
 - 9.43.2 Remaining Responses from the Applicant's to Spirit Energy Deadline 1 Submissions Appendix A: Analysis of Vantage data
 - 9.43.3 Remaining Responses from the Applicant's to Spirit Energy Deadline 1 Submissions Appendix B: Report on operational/safety impacts to Spirit and Harbour and CAA rule change
3. 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 Responses to Deadline 2 submissions

4. The Applicant's responses on Deadline 2 submissions are presented in **Sections 2.1 – Section 2.6.**

2.1 Maritime and Coastguard Agency (REP2-034)

Table 2.1 The Applicant's response to the Maritime and Coastguard Agency Deadline 2 submission (REP2-034)

ID	Relevant Representation	Applicant comment
REP2-034-01	<p>Dear Sir/Madam</p> <p>Application by Morecambe Offshore Windfarm Limited for an Order Granting Development Consent for the Morecambe Offshore Wind Farm Generation Assets</p> <p>Planning Act 2008 – Section 89 and The Infrastructure Planning (Examination Procedure) Rules 2010</p> <p>Deadline 1 – Written Representation</p>	The Applicant notes this response.
REP2-034-02	<p>The Maritime and Coastguard Agency (MCA) is an Executive Agency of the Department for Transport and is responsible throughout the UK for implementing and developing the UK Government's maritime safety and environmental protection policy. This includes co-ordinating maritime Search and Rescue (SAR) through His Majesty's Coastguard 24 hours a day, and checking that ships meet UK and international safety rules. The MCA works to prevent the loss of lives on the coast and at sea, to ensure that vessels are safe, and to prevent coastal pollution. The UK Technical Services Navigation Branch is responsible for UK radiocommunication and navigation policy. This primarily covers SOLAS Convention (Safety of Life at Sea Convention 1974, as amended) Chapters IV and V; the COLREG Convention (International Regulations for Preventing Collisions at Sea 1972, as amended); and the ITU Convention (International Telecommunications Convention 1932, as amended).</p>	The Applicant notes this response.
REP2-034-03	<p>The Navigation Risk Assessment (NRA), the Shipping and Navigation chapter of the Environmental Impact Report and draft DCO have been reviewed and we would like to comment as follows:</p>	The Applicant notes this response.

ID	Relevant Representation	Applicant comment
5.1.14 Volume 5 - Chapter 14 -Shipping and Navigation (APP-051) and 5.2.14.1 Volume 5 - Appendix 14.1 - Navigation Risk Assessment (APP-073)		
REP2-034-04	<p>Morecambe Offshore Windfarm Limited has undertaken a detailed Navigation Risk Assessment (NRA) in accordance with MCA guidance MGN (Marine Guidance Note) 654 and NRA risk assessment methodology. We are satisfied that appropriate traffic data has been collected in accordance with MGN654, which includes three 14-day marine vessel traffic surveys in February 2022, July/August 2022, and November/December 2023, supplemented by 12 months of AIS data from both 2019 and 2022. Key and appropriate stakeholders were identified, and the MCA is content that suitable consultation took place via two hazard identification workshops, dedicated meetings and navigational simulation sessions. A completed MGN654 Checklist has been provided as part of the NRA, and we are content the recommended NRA process has been followed.</p>	<p>The Applicant notes the Maritime and Coastguard Agency's (MCA) response.</p>
REP2-034-05	<p>1. Navigable sea room, collision and allision risks</p> <p>Following extensive consultation from the applicant with key stakeholders which included a multi-day HAZID workshop and navigational simulation exercises to assess the affect the development may have on shipping, in particular ferry routes, some navigational safety risks were found to be unacceptable. This led to a decision by the applicant to reduce the western boundary to increase the sea room for the ferry routes. Through further assessment and consultation, including additional bridge simulation exercises and a second HAZID workshop, the refined Red Line Boundary and risk controls reduced the perceived collision and allisions risk to tolerable levels.</p>	<p>The Applicant notes the Maritime and Coastguard Agency (MCA) response and confirms that the adequacy of the methodology, consultation and data collection have been agreed with the MCA as part of the initial Statement of Common Ground (SoCG) submitted at Deadline 1 (REP1-068).</p>
REP2-034-06	<p>2. Shipping and Navigation Mitigation Measures</p> <p>The list of applied (embedded) risk controls in Table 12 of the NRA and adopted additional risk controls in Table 45 of the NRA, are appropriate for reducing safety risks to As Low As Reasonably Practicable (ALARP).</p>	<p>The Applicant notes the MCA response and confirms that the findings of the Navigation Risk Assessment (NRA) (APP-073) have been agreed with the MCA as part of the SoCG submitted at Deadline 3 (Draft Statement of Common Ground with Maritime and Coastguard Agency_Rev 02 (Document Reference 9.9)).</p>
REP2-034-07	<p>3. Layout Design</p> <p>The turbine layout design must be compliant with MGN654 and it will require MCA and Trinity House approval prior to construction to minimise the risks to surface vessels, including rescue boats, and search and rescue aircraft</p>	<p>The Applicant notes the MCA response and confirms that the layout principles will be taken into account when the final design plan is being prepared, including the</p>

ID	Relevant Representation	Applicant comment
	operating within the site. MCA will seek to ensure all structures are aligned in straight rows and columns with a minimum of two lines of orientation. The layout commitment for two lines of orientation are recognised and welcomed for reducing risks to mariners and SAR aircraft.	commitment to two lines of orientation along with all the other layout principles.
REP2-034-08	4. Marking and Lighting. MCA will seek to ensure the turbine numbering system follows a 'spreadsheet' principle and is consistent with other windfarms in the UK. All lighting and marking arrangements will need to be agreed with MCA and Trinity House. The MCA requires all aviation lighting to be visible 360° and compatible with night vision imaging systems, as detailed in CAP 764 and MGN654 Annex 5.	The Applicant notes the MCA response and confirms that this is secured as part of Condition 18(1)(h) (aids to navigation management plan) and Condition 12 (offshore safety management) of the deemed marine licence (Schedule 6 of the draft Development Consent Order (DCO) submitted at Deadline 2 (REP2-002)).
REP2-034-09	5. Emergency Response and Search and Rescue. There is an expectation that the presence of wind farms will increase the likelihood of the requirement for emergency response, not just from navigational incidents but from other incidents such as medical evacuation or pollution. A SAR checklist based on the requirements in MGN654 Annex 5 will need to be completed in agreement with MCA before construction starts. This will include the requirement for an approved Emergency Response Co-operation Plan (ERCoP).	The Applicant notes this response and confirms that mitigation associated with Search and Rescue (SAR) is secured as part of Condition 9 (Pre-construction plans and documentation) and Condition 12 (Offshore safety management) of the deemed marine licence (Schedule 6 of the Draft DCO submitted at Deadline 2 (REP2-002)).
REP2-034-10	The NRA outlines the most likely incidents which may result in a required emergency response though does not fully consider the additional demand likely caused by the presence of personnel offshore, as has been experienced from some other windfarms of comparable size. Since the operations and maintenance strategy is not yet clear or the type of vessels utilised (e.g. crew transfer vessels or service operations vessels), it is difficult to determine what resource and capability will be on site and what the availability of this will be at this stage. There may be situations requiring a SAR response where project vessels are unavailable due to weather or crew rotation etc. It should be noted that the presence of a windfarm diminishes the SAR capability and even with an MGN654 compliant layout, there are still no guarantees of an effective SAR response and therefore consideration should be given as to how the windfarm will mitigate this reduction.	Both Sections 8 and 9 of Volume 5, Appendix 14.1: Navigation Risk Assessment (APP-073) provide a detailed assessment of the likelihood and consequences of different hazardous scenarios which might necessitate a SAR response. Whilst the presence of personnel working as part of the Morecambe Offshore Windfarm during construction, operations and maintenance and decommissioning may result in an increase in SAR demand, sufficient mitigation will be put in place to manage this. At the time of Application, it is not known the specifics of either the construction or operations and maintenance programme. As identified within Paragraph 8.6.2.1.1 of the NRA (APP-073), it is likely that the first responders to any incident would be Morecambe Offshore Windfarm vessels avoiding the need for separate SAR presence. These vessels will have appropriate rescue and medical capability and will be

ID	Relevant Representation	Applicant comment
		<p>set out within the Emergency Response Co-operation Plan (ERCoP), as required by Marine Guidance Note (MGN) 654 Annex 5 and therefore secured as part of Condition 12 (offshore safety management) of the deemed marine licence (Schedule 6 of the Draft DCO submitted at Deadline 2 (REP2-002).</p>
REP2-034-11	<p>During SAR discussions, particular consideration will need to be given to the implications of the site size and location. Attention should be paid to the level of radar surveillance, AIS and shore-based VHF radio coverage and give due consideration for appropriate mitigation such as radar, AIS receivers and in-field, Marine Band VHF radio communications aerial(s) (VHF voice with Digital Selective Calling (DSC)) that can cover the entire wind farm site and surrounding areas. It would have been helpful for the NRA to consider radio reception interference caused by larger turbines; however we would expect radio surveys to be conducted pre-construction and post-construction to confirm and compare levels of coverage. It will also be expected to discuss the provision of AIS and VHF capability to the MCA with direct access to HM Coastguard systems.</p>	<p>Whilst it is recognised that the Morecambe Offshore Windfarm may reduce SAR capability within the Morecambe Offshore Windfarm, the Project has committed to both two lines of orientation and minimum spacing of 1,060 m between infrastructure which greatly exceed industry best practice set out in MGN654 Annex 5. On occasions where there are no vessels within the Morecambe windfarm array area, these commitments would facilitate safe and effective SAR missions. Therefore, the Applicant believes that the above measures will ensure impacts to SAR are reduced to As Low As Reasonably Practicable (ALARP).</p> <p>The Applicant notes that Section 8.8. of Volume 5, Appendix 14.1 Navigation Risk Assessment (APP-073) states that previous studies have not identified any significant adverse impacts on radio reception from offshore windfarms. The Applicant is unaware of any specific evidence to challenge this. The Applicant confirms that the mitigation associated with SAR and communications will be secured as part of Condition 12 (offshore safety management) of the deemed marine licence (Schedule 6 of the Draft DCO submitted at Deadline 2 (REP2-002).</p> <p>As part of this, the Applicant confirms that the requirement for and nature of radio surveys will be agreed with the MCA during the post-consent/pre-construction phase; this is agreed in the updated SoCG being submitted at Deadline 3 (Document Reference 9.9). And the Applicant would not object to provision of access to HM Coastguard to Automatic Identification System (AIS) or Very High</p>

ID	Relevant Representation	Applicant comment
		Frequency (VHF) coverage, providing this can be achieved technically and without creating a security risk. The Applicant confirms that mitigation associated with SAR is secured as part of Condition 9 (Pre-construction plans and documentation) and Condition 12 (Offshore safety management) of the deemed marine licence (Schedule 6 of the Draft DCO submitted at Deadline 2 (REP2-002)).
REP2-034-12	There are 1300 charted wrecks in the study area which could pose a risk of releasing pollution over time and this may require an environmental response. Within the boundaries of a windfarm, emergency response becomes more complex and this must be considered in the Marine Pollution Contingency Plan.	The Applicant further notes the 1300 charted wrecks in the Study Area and confirms that the preparation of a Marine Pollution Contingency Plan is secured under Condition (9)(1)(e)(i) in the deemed marine licence (Schedule 6 of the draft DCO submitted at Deadline 2 (REP2-002)).
REP2-034-13	<p>6. Construction scenarios.</p> <p>We would expect to see some form of linear progression of the construction programme avoiding disparate construction sites across the development area, and the consent needs to include the requirement for an agreed construction plan to be in place ahead of any works commencing.</p>	The Applicant notes this response and confirms that construction will only occur within the buoyed construction area as set out in the Aids to Navigation Management Plan which will be prepared post-consent and is secured under Condition 9(1)(h) of the deemed marine licence (Schedule 6 of the draft DCO (REP2-002)). A construction programme and a construction method statement will also be prepared which are also secured under Condition 9(1)(b) and Condition 9(1)(d) respectively within Schedule 6 of the draft DCO submitted at Deadline 2 (REP2-002).
REP2-034-14	<p>7. Cable Routes.</p> <p>Cable routes, cable burial protection index and cable protection are issues that are yet to be fully developed. However due cognisance needs to address cable burial and protection, particularly close to shore where impacts on navigable water depth may become significant. Any consented cable protection works must ensure existing and future safe navigation is not compromised. If cable protection measures are required e.g., rock bags or concrete mattresses, the MCA would accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum. This will be particularly relevant where depths are decreasing towards shore and potential impacts on navigable water increase.</p>	The Applicant notes this response and confirms that an Offshore Construction Method Statement which includes a Cable Specification and Installation Plan and cable burial risk assessment is secured under Condition 9(1)(d)(i) of Schedule 6 of the draft DCO submitted at Deadline 2 (REP2-002). The condition limits the height of cable protection exceeding five percent navigable depth without prior written approval from the Licensing Authority in consultation with the MCA.

ID	Relevant Representation	Applicant comment
REP2-034-15	Should HVDC cables be installed, consideration must be given to the effect of electromagnetic deviation on ships' compasses. The MCA would be willing to accept a three-degree deviation for 95% of the cable route. For the remaining 5% of the cable route no more than five degrees will be attained. We would expect the applicant undertake a desk based compass deviation study based on the specifications of the cable lay proposed and assess the effect of EMF on ship's compasses. MCA may request for a deviation survey post cable installation which will confirm conformity with the consent condition. The applicant should then provide this data to UKHO via a hydrographic note (H102), as they may want a precautionary notation on the appropriate Admiralty Charts (actions at a later stage depending upon the desk-based study and post installation deviation survey).	The Applicant further notes that the cable envelope for inter-array, and possible platform link cables only includes for High Voltage Alternating Current (HVAC) cables, High Voltage Direct Current (HVDC) cables will not be installed, and therefore no effect is anticipated on ships' compasses.
REP2-034-16	8. Safety Zones. The requirement and use of safety zones as detailed in the application is noted, and MCA will comment on the safety zone application once submitted. Safety zones during the construction, maintenance and decommissioning phases are supported. A detailed justification would be required for a 50m operational safety zone, with significant evidence from the construction phase in addition to the baseline NRA required supporting the case. Safety zones triggered by a Service Operation Vessel connecting to a wind turbine will not be supported.	The Applicant notes this response. As set out in the Safety Zone Statement (APP-023), during the operations and maintenance phases, the Applicant only intends to apply for safety zones of 500 m around infrastructure where major maintenance works are being undertaken (for example a blade replacement). Safety zones around service operation vessels connecting to a wind turbine generator or 50 m safety zones around infrastructure not undergoing major maintenance have not been proposed.
REP2-034-17	9. Cumulative impacts We welcome the further work by the project in regard to the Cumulative Regional Navigation Risk Assessment (CRNRA). MCA concerns raised in response to the PEIR dated 31 May 2023 regarding the cumulative impacts of the neighbouring Mona and Morgan windfarms have been addressed by the boundary changes. We are content that these changes have resulted in the unacceptable safety risks identified in the section 42 response being reduced to ' <i>Medium Risk – Tolerable if ALARP</i> '.	The Applicant notes this response.
REP2-034-18	There remains a concern that the in-combination effects of the Mona, Morgan, Morecambe and Mooir Vannin offshore wind farms will have significant impacts to ferry operations in the Irish Sea. Whilst this is more of a commercial issue MCA is an executive agency of the Department for Transport and we are concerned with the economic impacts on the nationally	The Project in combination with cumulative projects could have infrequent potential significant effects on ferry services between Liverpool and Belfast (east of Isle of Man) in adverse weather conditions (as identified in section 7.3 of the Cumulative Regional Navigation Risk Assessment (CRNRA) [APP-074]). The contribution of the

ID	Relevant Representation	Applicant comment
	and internationally important ferry routes in the Irish Sea and whether these services will remain commercially viable with the necessary deviations.	Project is not considered material to the level of significance assigned, with impacts driven by the other cumulative projects. The Applicant is engaging with the affected operators on the residual impacts and will continue to do so through the Examination phase of the Morecambe Offshore Windfarm
REP2-034-19	3.1 Volume 3 - Draft Development Consent Order (APP-012) MCA contact details in Schedule 6 Part 1 should be amended to: Maritime and Coastguard Agency UK Technical Services Navigation Spring Place 105 Commercial Road Southampton SO15 1EG Email: navigationsafety@mcga.gov.uk	Noted. This will be amended in the updated version of the draft DCO submitted at Deadline 4.
REP2-034-20	Schedule 6 Part 2: <ul style="list-style-type: none"> Condition 18(1) must include the following additional sub-paragraphs: <i>latitude and longitude coordinates of the centre point of the location for each wind turbine generator, offshore platform, substation, booster station and meteorological mast; provided as Geographical Information System data referenced to WGS84 datum.</i> <i>latitude and longitude coordinates of the inter array cables; provided as Geographical Information System data referenced to WGS84 datum.</i> 	This was included in the updated version of the draft Development Consent Order submitted at Deadline 2 (REP2-002 and REP2-003).
REP2-034-21	There does not appear to be a condition where agreed micro-siting distances are confirmed. To provide consistency with the licence conditions for the Mona and Morgan offshore wind farms, MCA would be content with 50m for micro-siting and 5m for tolerance.	As discussed by the Applicant at ISH1, and as noted in its Written Summary of Oral Submissions (REP1-085 at ID 3, pg. 20), as an envelope approach has been used and the precise locations of the Wind Turbine Generators (WTGs) and other infrastructure is not identified in the application, "micro-siting" occurs at the detailed design stage to inform the final proposed locations of infrastructure within the design plan that is secured by DML condition 9(1)(a). However, the Applicant notes comments from interested parties including the MCA and others confirming that

ID	Relevant Representation	Applicant comment
		micrositing limits should be added to this condition. This will be added in the version of the draft DCO submitted at Deadline 4.
REP2-034-22	The comments detailed above are to highlight areas of concern, and items to be addressed by the applicant in consultation with the MCA and navigation stakeholders to ensure the risk to the safety of navigation and the impact on SAR capability remains low.	The Applicant notes this and confirms that the Applicant will continue to consult on these matters with the MCA and navigation stakeholders throughout the Project development.

2.2 Marine Management Organisation (REP2-035)

Table 2.2 The Applicant's comments on the MMOs Deadline 2 submission (REP2-035)

ID	Deadline 2 Submission comment	Applicant response
D2-REP2035-01	<p>10 December 2024</p> <p>Dear Robert Jackson,</p> <p>Planning Act 2008, Floatation Energy, Proposed Morecambe Offshore Windfarm Generation Assets</p> <p>Deadline 2 Submission</p> <p>On 27 June 2024, the Marine Management Organisation (the "MMO") received notice under section 56 of the Planning Act 2008 (the "PA 2008") that the Planning Inspectorate ("PINS") had accepted an application made by Morecambe Offshore Windfarm Ltd (the "Applicant") for determination of a development consent order for the construction, maintenance and operation of the proposed Morecambe Offshore Windfarm (the "DCO Application") (MMO ref: DCO/2022/00001; PINS ref: EN010121).</p>	The Applicant notes this response.
D2-REP2035-02	The DCO Applicant seeks authorisation for the construction, operation and maintenance of Morecambe Offshore Generation Assets. The proposal is located 30 kilometres (km) from the Lancashire coast, England. The windfarm Agreement for Lease area awarded by The Crown Estate spans 125 km squared (km ²). The proposed windfarm site development area has been reduced to approximately 87km ² . All project infrastructure will be located within the 87km ² windfarm site. The project consists of up to 35 Wind Turbine Generators (WTG), UP TO TWO Offshore substations (OST), their associated foundations and platform link cables. Inter-array cables. Scour protection around foundations and subsea cable protection where required.	
D2-REP2035-03	One Deemed Marine Licence (DML) is included in the draft DCO. The DML relates to offshore (WTG) and Associated Infrastructure and Associated Development.	
D2-REP2035-04	As a marine licence has been deemed within the draft DCO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement, and revocation of provisions relating to the marine environment. As such the MMO has an interest in ensuring that provisions drafted in a deemed marine licence enable the MMO to fulfil these obligations.	
D2-REP2035-05	This document comprises the MMO's submission for Deadline 2.	

ID	Deadline 2 Submission comment	Applicant response
D2-REP2035-06	This written representation is submitted without prejudice to any future representation the MMO may make about the DCO Application throughout the examination process. This representation is also submitted without prejudice to any decision the MMO may make on any associated application for consent, permission, approval or any other type of authorisation submitted to the MMO either for the works in the marine area or for any other authorisation relevant to the proposed development.	
1. Comments on National Federation of Fishermen's Organisations (NFFO) (RR-059) Fisheries Liaison and Coexistence Plan (Document Reference APP-147)		
1.1 General Comments		
D2-REP2035-07	It is likely that there will be an impact to fishing operations and to other legitimate users of the sea, as temporary exclusion zones will be in force around the works site for the duration of the proposed works. This could result in temporary restrictions of access to fishing grounds or navigation routes. The MMO notes the inclusion of safety zones within the Environmental Statement Volume 5: Chapter 13: Commercial Fisheries. The MMO will maintain a watching brief on any issues in relation to the Outline Fisheries Liaison and Co-Existence Plan.	<p>Noted, the Applicant remains engaged with commercial fisheries stakeholders, with the following draft Statement of Common Ground (SoCGs) submitted at Deadline 1:</p> <ul style="list-style-type: none"> ▪ Draft Statement of Common Ground with the National Federation of Fishermen's Organisations (NFFO) and the Welsh Fisheries Association (WFA)/ Cymdeithas Pysgotwyr Cymru (REP1-063) ▪ Draft Statement of Common Ground with Isle of Man Territorial Seas Committee (IoM TSC) <p>The SoCGs above will be updated and submitted at Deadline 4 (noting an updated SoCG with the IoM TSC has also been submitted at Deadline 3). An updated Outline Fisheries Liaison and Co-Existence Plan Rev 02 Clean (Document Reference 6.3) has been submitted at Deadline 3.</p>
D2-REP2035-08	The MMO defers to the National Federation of Fishermen's Organisations along with standalone representatives on matters of commercial fisheries. The MMO will continue to be part of the discussions relating to securing any mitigation, monitoring or other conditions required within the DML.	As above, the Applicant continues to engage with the NFFO and WFA with a draft SoCG submitted at Deadline 1 (REP1-063). The Applicant notes the MMO's comment regarding involvement in mitigation, monitoring or other

ID	Deadline 2 Submission comment	Applicant response
		conditions required within the deemed marine licence (dML).
D2-REP2035-09	The Applicant should seek advice via the Fisheries Liaison Officer (FLO) when the timetable of works is known so that the local industry can provide real-time advice.	The Applicant notes this comment and confirms that a Fisheries Liaison Officer (FLO) is in place who maintains regular communication with the local fisher's associations.
D2-REP2035-10	The MMO notes that the MMO will not act as arbitrator in regard to compensation to fishers that may be affected by the works, and the MMO will not be involved in discussions on the need for or amount of compensation being issues. This must be clear within the Outline Fisheries Liaison and Coexistence Plan.	The Applicant notes this comment and has updated the Outline Fisheries Liaison and Coexistence Plan (FLCP) to clarify this matter (Outline Fisheries Liaison and Co-Existence Plan_Rev 02 Clean (Document Reference 6.3)).The Applicant notes that the Outline FLCP makes provision for a compensation strategy to be developed post-consent that would establish the eligibility and mechanism for compensation payments. The requirement to agree a final FLCP (in accordance with the Outline FLCP) is secured by Condition 9(1)(f) of the dML.
2. Comments on PD1-011 Applicant's response to Relevant Representations from Marine Management Organisation		
2.1 General Comments		
D2-REP2035-11	The MMO provided comments at Deadline 1 (REP1-1-096) and has provided further comments in Table 1 for ease of viewing, anything in grey was responded to at Deadline 1 and there is no update at this time but may be future updates when updated documents are submitted or the MMO has moved the position forward.	The Applicant notes this comment and has replicated these comments below as part of Table 2.3 , providing a response where required.
2.2 Fish biology and Fisheries		
D2-REP2035-12	The MMO and Centre for Environment, Fisheries and Aquaculture Science (CEFAS) Fisheries are not satisfied with some of the Applicant's responses to relevant representations and maintain that a temporal restriction on piling activities during the cod spawning season (1 January – 30 April inclusive) is conditioned on the deemed marine licence (see Table 1 RR-047-58, RR-047-59, RR-047-60).	The Applicant has provided an Outline Underwater Noise Management Strategy (UWSMS) which includes consideration of seasonal restrictions, however, maintains that Project design refinements and other

ID	Deadline 2 Submission comment	Applicant response
		<p>mitigations can suitably reduce potential impacts from piling. The Applicant also notes that consideration (as stated in the UWSMS) should also be given to the peak spawning season rather than the full season (as has been discussed for the Mona and Morgan projects).</p> <p>The Project's DCO Application includes turbine foundations that would not require piling and the draft MMMP outlines potential mitigation available to address the impacts of piling on marine mammal species, should piling be required for Wind Turbine Generators (WTGs) and/or Offshore Substation Platforms (OSP) foundations. The UWSMS has been designed to cover mitigation for potential impacts on both marine mammal and fish species, which would otherwise fall outside of the scope of a standard MMMP.</p> <p>The Applicant considers the UWSMS, which would require consultation with Natural England and other interested parties as deemed relevant by the MMO prior to approval, to be an effective mechanism to agree appropriate mitigation for spawning cod receptors impacted by underwater noise. The Applicant therefore considers that imposition of a condition on the dML to restrict piling activities during the cod spawning season would be repetition of the commitments secured in the UWSMS and therefore such a condition would be neither reasonable nor necessary.</p>
(Table 1 from REP2-035 is presented below as part of Table 2.3 for ease)		

ID	Deadline 2 Submission comment	Applicant response
3. The MMO comments on the updated DCO/DML		
3.1 Transfer of the Benefit of the Order		
D2-REP2035-13	The MMO objects to the provisions relating to the process of transferring and/or granting the deemed marine licence set out in the draft DCO at Article 7.	The Applicant notes this response and would refer to its response to the MMO (ID RR-047-23) of its Response to Relevant Representations (PD1-011).
D2-REP2035-14	The MMO understands that Article 7 – Benefit of the Order is drafted in a similar way to previous consents granted by the Secretary of State (SoS), however the MMO has major concerns over the wording.	
D2-REP2035-15	<p>Article 7(1)-(2) gives the right to permanently transfer the benefits of the DCO including the deemed marine licences (DML) in Schedule 6 to a third party with the consent of the SoS.</p> <p><i>“Part 2: Article 7(1)-(2)</i></p> <p><i>7.—(1) Subject to this article, the provisions of this Order have effect solely for the benefit of the undertaker.</i></p> <p><i>(2) Subject to paragraphs (3), (4) and (5) the undertaker may with the written consent of the Secretary of State—</i></p> <p><i>(a) transfer to another person (“the transferee”) any or all of the benefit of the provisions of this Order (including the deemed marine licence) and such related statutory rights as may be agreed between the undertaker and the transferee; and</i></p> <p><i>(b) grant to another person (“the lessee”) for a period agreed between the undertaker and the lessee any or all of the benefit of the provisions of this Order (including the deemed marine licence) and such related statutory rights as may be so agreed,</i></p> <p><i>except where paragraph (5) applies, in which case the consent of the Secretary of State is not required.”</i></p>	The Applicant would note that, while the DML is included within the scope of Article 7(1) and (2), 7(2) is subject to paragraph (3), which restricts the Secretary of State from unilaterally transferring the benefit of the DML as the MMO must be consulted on such transfer.
D2-REP2035-16	The MMO considers that this is a clear departure from the 2009 Act, which would normally require the licence holder (here ‘the undertaker’) to make an application to the MMO for a licence to be transferred. Instead, this provision operates to make the decision that of the undertaker, with the Secretary of State (SoS) providing consent to the transfer, rather than the MMO as the regulatory authority for marine licences considering the merits of any application for a transfer. Parliament has already created a statutory regime for such a process, and it is unclear what purpose the written consent of the SoS actually serves. If the intention is for the undertaker to be able to transfer the benefits under the terms of the	The Applicant does not consider there to be any legal impediment to including this Article in the draft DCO and this has been accepted by the Secretary of State in a number of recently granted offshore wind farm DCOs, including Sheringham Shoal and Dudgeon Extensions

ID	Deadline 2 Submission comment	Applicant response
	DCO outside the established procedures under 2009 Act, the MMO queries why is it considered necessary or appropriate for the SoS to 'approve' the transfer of the DML.	Offshore Wind Farm Order 2024 and the Hornsea Four Offshore Wind Farm Order.
D2-REP2035-17	It is also unclear what criteria the SoS would be taking in determining whether to approve any transfer, and how this would differ from a consent granted by the MMO under the existing 2009 Act regime.	<p>Article 7 follows precedent offshore wind farm orders. It provides the transfer or grant of DCO powers to take place with the written consent of the Secretary of State. The deemed marine licence may also be transferred. Article 7(3) requires the Secretary of State to consult with the MMO before giving consent to the transfer or grant to another person of the benefit of either deemed marine licence.</p> <p>Section 120 of the Planning Act 2008 sets out what may be included in an order granting development consent. Section 120(3) sets out that an order granting development consent may make provision relating to, or to matters ancillary to, the development for which consent is granted. Section 120(4) states that the provision made in 120(3) includes, in particular, provisions for or relating to any of the matters listed in Part 1 of Schedule 5 of the Planning Act 2008. Part 1 lists as 30A, deeming a marine licence under Part 4 of the Marine and Coastal Access Act 2009 to have been given by the Secretary of State for activities specified in the order and subject to such conditions as may be specified in the order. In addition, Section 120(5)(a) states that an order granting development consent may apply, modify or exclude a statutory provision which relates to any matter for which provision may be made in the order. Section 120(6) states that in subsection (5) "statutory provision" means a provision of an Act or of an instrument made under an Act. Section 120(8)</p>
D2-REP2035-18	<p>Because of this confusion and potential duplication, it is the position of the MMO that these provisions are removed and that any transfer should be subject to the existing regime under the 2009 Act, with the decision maker remaining the MMO. The MMO has concerns regarding Article 7(4).</p> <p>3.1.4 Article 7(3)</p> <p><i>"7(3) The Secretary of State must consult the MMO before giving consent to the transfer or grant to another person of the benefit of any or all of the provisions of the deemed marine licence."</i></p>	
D2-REP2035-19	The MMO notes that there is no obligation for the SoS to take into account the views of the MMO when providing its consent. Furthermore, there is no obligation for the MMO to be informed of the decision of the SoS, notwithstanding its impact on the MMO as the licencing authority. From a regulatory perspective it is highly irregular that a decision to transfer a licence should not be the decision of the regulatory authority in that area (the MMO), but instead should be subject to such a cursory process as is set out in Article 7(1)-(2).	
D2-REP2035-20	The MMO thus resists this change as unworkable. As explained above, Articles 7 (1)-(2) sets out what is effectively a new non-legislative regime for the variation and transfers of marine licences. In support of these provisions, Article 7(11) explicitly disapplies sections 72(7) and (8) of the 2009 Act, which would otherwise govern these procedures.	
D2-REP2035-21	<p>3.1.5 Article 7(11).</p> <p><i>"(11) Section 72(7) and (8) of the 2009 Act do not apply to a transfer or grant of the whole or part of the benefit of the provisions of the deemed marine licence to another person by the undertaker pursuant to an agreement under this article save that the MMO may amend any deemed marine licence granted under Schedule 6 of the Order to correct the name of the undertaker to the name of a transferee or lessee under this article."</i></p> <p>This conflicts with the MMO's stated position that the DML granted under a DCO should be regulated by the provisions of the 2009 Act, and specifically by all provisions of section 72. Section 72(7)(a) of the 2009 Act permits a licence holder to make an application for a</p>	

ID	Deadline 2 Submission comment	Applicant response
	marine licence to be transferred, and, where such an application is approved, for the MMO to then vary the licence accordingly (s. 72(7)(b)). This power that should be retained and used in relation to the DML granted under the DCO and the MMO therefore resists the inclusion of this article 7(11) to disapply these provisions.	lists that a development consent order may not include provision to create offences and other related matters. Section 149A of the Planning Act states that an order granting development consent may include provision deeming a marine licence to have been issued under Part 4 of the Marine and Coastal Access Act 2009.
D2-REP2035-22	The key concern held by the MMO is that Article 7 operates to override and/or unsatisfactorily duplicate provision that already exist within the 2009 Act for dealing with variations to marine licences. Such provisions are also inconsistent with the PINS Guidance on how DMLs should operate within a DCO. Advice Note Eleven, Annex B, (https://infrastructure.planninginspectorate.gov.uk/legislationandadvice/advicenotes/an11-annex-b/), provides that where the undertaker choses to have a marine licence deemed by a DCO, the MMO, <i>“will seek to ensure wherever possible that any deemed licence is generally consistent with those issued independently by the MMO.”</i> Article 7 as drafted is not in compliance with this guidance.	The wording of Article 7 in the draft DCO is within the scope of what may be included in a DCO pursuant to Section 120(5)(a). The statutory provisions on transfer of the marine licence proposed to be modified clearly ‘relate’ to ‘matters’ (i.e. the marine development and deemed marine licence) for which provision is made in the draft DCO. The matters to which Section 120(5)(a) relates are not limited to the ‘ancillary’ matters to which Sub-sections 120(3) and 120(4) relate (and indeed the ancillary matters in relation to which provision may be made by a DCO pursuant to Sub-sections 120(3) and 120(4) are not limited those matters listed in Part 1 of Schedule 5 – hence the word “includes” in Section 120(4)). The existing precedent of made Orders referred to above confirms this. It is hoped that this explanation gives comfort and reassurance to the MMO that the public law position is not as restrictive as suggested in its response.
D2-REP2035-23	The MMO objects to the provisions relating to the process of transferring and/or granting the deemed marine licences set out in the draft DCO at Part 2, Article 7 insofar as these are intended to apply to the MMO and requests paragraphs 7(3), 7(7) and 7 (11) be removed in their entirety, with a clarification added to specifically exclude these provisions from applying to the MMO (with corresponding wording amended in the Deemed Marine Licences).	
D2-REP2035-24	The MMO is concerned that the procedure proposed represents an unnecessary duplication of the existing statutory regime set out in s72 of the 2009 Act and that it will give rise to significant enforcement difficulties for the MMO. The MMO also considers that it has the potential to prejudice the operation of the system of marine regulatory control in relation to the proposed development. The MMO also regards the proposed procedure as cumbersome, more administratively burdensome, slower and less reliable than the existing statutory regime set out in s72 of the 2009 Act.	
D2-REP2035-25	As a matter of public law, the MMO does not think the Order can contain a provision transfer of Benefit of the DML as is being proposed. PA 2008 Section 120(3) should read against Section 120(4) and Part 1 of Schedule 5, which the MMO thinks limits what the Order can contain to provisions which deem a marine licence to be granted under the order and to the conditions that should be deemed attached to that licence. The MMO does not consider this to be sufficiently wide as to allow the inclusion of provisions which transfer the Benefit of the Order.	The Applicant considers it logical that if the Planning Act 2008 enables the Secretary of State to deem a marine licence within the granting of a DCO, and that as a DCO may make provision relating to, or to matters

ID	Deadline 2 Submission comment	Applicant response
D2-REP2035-26	If the Order cannot contain a DML transfer provision for the reasons set out, then it cannot exclude Section 72 of Marine and Coastal Access Act 2009 (MCAA 2009) in the way proposed as Section 120(5) is limited to applying/modifying/excluding only those statutory provisions which relate to any matter for which a provision may be made in the order.	ancillary to, the development for which consent is granted, then it must be the case that the Secretary of State may also transfer the deemed marine licence as part of the wider transfer of benefit of the DCO.
D2-REP2035-27	Overall, the MMO continues to raise objection to Article 7 and will provide further comments to the Applicant as soon as possible and follow that to the ExA at each deadline.	The proposed approach is also practical – given that both development consent and a marine licence are required for the Project, it is preferable if the transfer provisions ensure that both consents are transferred (or not) together via a single process (avoiding the need for duplication of process and potential confusion or misalignment).
D2-REP2035-28	Additionally, there are practical considerations. When the MMO transfer a licence under s72(7) of MCAA the MMO must vary it. If the transfer was affected under the Order the MMO are likely to need to vary the licence as a result, under s153 and the schedule 6 of the Planning Act 2008, only the MMO can do that. The MMO could end up with the transfer being affected under the Order, but then having to vary separately using our own powers. If the transferring of the unvaried licence impacted on the MMO's ability to enforce during this time, this could lead to the MMO having to suspend the licence whilst the variation was carried out.	It is also noted that the draft DCO does not seek powers for the Secretary of State to determine or make variations to the substance of the deemed marine licence in the future – that resides solely with the MMO (again, as is usual practice for offshore wind DCOs).
D2-REP2035-29	The MMO do not consider that the Planning Act 2009 allows the DCO to make a provision to transfer the benefit of the DML in the way that is proposed.	The Applicant also notes that the MMO will provide further comments on its position and will provide a response to any further comments once received. However, it is hoped that the position set out above is clear and helpful, and will enable this issue to be resolved.
3.2 Force Majeure		
D2-REP2035-30	Condition 8 reads as follows: <i>“8.—(1) If, due to stress of weather or any other cause, the master of a vessel determines that it is necessary to deposit the authorised deposits outside of the Order limits because the safety of human life or of the vessel is threatened, within 48 hours the undertaker must notify full details of the circumstances of the deposit to the MMO. 43 (2) The unauthorised deposits must be removed at the expense of the undertaker unless written approval is obtained from the MMO.”</i>	The Applicant notes the MMO's position. Reference is made to the Applicant's response to the MMO on this point in its Response to Relevant Representations (PD1-011 at ID RR-047-20, pg. 45). The Applicant will provide a response to any further comments from the MMO received at Deadline 3, if required.

ID	Deadline 2 Submission comment	Applicant response
	The MMO do not consider this clause is necessary and will provide further comments at Deadline 3.	
3.3 Materially and Part 1: Paragraph 9 of the Deemed Marine Licence		
D2-REP2035-31	The MMO is currently reviewing any changes required to this Paragraph and any other sections within the DML required and will provide an update at Deadline 3.	The Applicant will provide a response to any further comments from the MMO received at Deadline 3, if required.
3.4 General Comments		
D2-REP2035-32	<p>The MMO would like to advise the ExA that there are a number of Conditions in addition to those mentioned within this response that are being reviewed and updates will be provided to the Applicant and the ExA in due course. These include:</p> <ul style="list-style-type: none"> ▪ Chemicals, drilling and debris 7(1) ▪ Construction monitoring 15(1) ▪ Marine Noise Registry 19(1) (2) (3) ▪ Completion of construction 18(1) ▪ Maintenance reporting (new condition) ▪ Decommissioning (new condition) 	The Applicant notes this comment.
4. Comments on Applicant's Deadline 1 Submissions		
4.1 General Comments		
D2-REP2035-33	<p>Any comments about the document as a whole – project sharing etc. The MMO notes the Applicant has submitted the following documents in Deadline 1:</p> <ul style="list-style-type: none"> ▪ REP1-007 Safety Zone Statement - Revision 02 (Volume 4) (Tracked) ▪ Rep1-009 Sediment Disposal Site Characterisation Report - Revision 02 (Volume 4) (Tracked) ▪ REP1-017 National Policy Statements Accordance Report - Revision 02 (Volume 4) (Tracked) ▪ REP1-019 Environmental Statement Non-Technical Summary - Revision 02 (Volume 5) (Tracked) 	The Applicant notes this comment.

ID	Deadline 2 Submission comment	Applicant response
	<ul style="list-style-type: none"> ▪ REP1-021 Environmental Statement Chapter 1: Introduction - Revision 02 (Volume 5) (Tracked) ▪ REP1-023 Environmental Statement Chapter 5: Project Description - Revision 02 (Volume 5) (Tracked) ▪ REP1-025 Environmental Statement Chapter 7: Marine Geology, Oceanography and Physical Processes - Revision 02 (Volume 5) (Tracked) ▪ REP1-027 Environmental Statement Chapter 8: Marine Sediment and Water Quality - Revision 02 (Volume 5) (Tracked) ▪ REP1-029 Environmental Statement Chapter 10: Fish and Shellfish Ecology - Revision 02 (Volume 5) (Tracked) ▪ REP1-031 Environmental Statement Chapter 11: Marine Mammals - Revision 02 (Volume 5) (Tracked) ▪ REP1-047 Environmental Statement Appendix 11.3: Marine Mammal Unexploded Ordnance Assessment - Revision 02 (Volume 5) (Tracked) ▪ REP1-049 Environmental Statement Appendix 11.4: Marine Mammal CEA Project Screening - Revision 02 (Volume 5) (Tracked) ▪ REP1-055 Outline Project Environmental Management Plan - Revision 02 (Volume 4) (Tracked) ▪ REP1-057 Outline Scour Protection and Cable Protection Plan - Revision 02 (Volume 6) (Tracked) ▪ REP1-060 Draft Statement of Common Ground with the Marine Management Organisation - Revision 01 (Volume 9) ▪ REP1-083 Marine Mammal Technical Note 1 (EIA) - Revision 01 (Volume 9) ▪ REP1-060 Draft Statement of Common Ground with the Marine Management Organisation – Revision 01 (Volume 9) ▪ REP1-085 Written Summary of the Applicant's Oral Submissions - Preliminary Hearing and Issue Specific Hearing 1 - Revision 01 (Volume 9) ▪ REP1-086 Response to Actions arising from Preliminary Meeting and Issue Specific Hearing 1 - Revision 01 (Volume 9) 	

ID	Deadline 2 Submission comment	Applicant response
D2-REP2035-34	At this time the MMO has no further comments regarding, REP1-009, REP1-017, REP1-019, REP1-021, REP1-023, REP1-025, REP1-027, REP1-029 and REP-049.	The Applicant welcomes this comment.
D2-REP2035-35	Regarding, REP1-007, REP1-031, REP1-047, REP1-055, REP1-057, REP1-083, REP1-085, the MMO is reviewing these documents alongside our technical advisors and will look to provide a response in due course.	The Applicant notes this comment and will review the MMO's responses when received.
D2-REP2035-36	REP1-060 Draft Statement of Common Ground with the Marine Management Organisation – the MMO will continue to discuss the SoCG with the Applicant and make comments on the draft at a future deadline.	The Applicant welcomes this response.
D2-REP2035-37	In relation to REP1-086 the MMO is reviewing the Applicant's response and is awaiting further discussion in relation to action point 12 and 14.	The Applicant intends to follow the precedent set by previous offshore windfarms with regard to the number of decimal points to be used in grid referencing of infrastructure, and notifying MMO if fraudulent or misleading information is provided.
5. Comments on Stakeholders' Deadline 1 Submissions		
5.1 Historic England (REP1-094)		
D2-REP2035-38	The MMO has reviewed Historic England's (HE) Written Representation (document reference REP1-095) for Deadline 1. The MMO defers to Historic England regarding matters of the historic environment.	The Applicant notes this comment.
D2-REP2035-39	The MMO notes that HE has provided comments in regard to Draft DCO. With regard to Schedule 6 Part 1 (Licensed Marine activities) 1 (4) (b) HE requests that the address of Historic England should be amended to: Historic England, 4th Floor, Cannon Bridge House, 25 Downgate Hill, London EC4R 2YA. The MMO welcomes this amendment.	This is amended in the revised draft DCO submitted at Deadline 2 (REP2-002). The Applicant welcomes the MMO's approval of the draft DML change.
D2-REP2035-40	With regard to Schedule 6 Part 2 (Conditions); Pre-construction plans and documentation, HE advise that it is essential that post-consent and pre-construction archaeological evaluation informs delivery plans to avoid in-situ archaeological sites, as could be revealed through assessments conducted and completed post-consent and pre-construction. HE would therefore expect a condition to be applied to that effect in the draft DML. The MMO welcomes this.	The requirement for WSIs is addressed through Condition 9(1)(f) and Condition 9(2) of the dML.

ID	Deadline 2 Submission comment	Applicant response
D2-REP2035-41	<p>HE request Condition 9 (1) (f) is revised to</p> <p><i>“An offshore written scheme of investigation for archaeology in relation to the Order limits, which must accord with an outline marine written scheme of investigation produced in consultation with the statutory historic body at least 12 weeks prior to the commencement of any survey work unless otherwise agreed by the MMO; to include—”</i></p> <p>The MMO welcomes this update.</p>	<p>This matter was discussed with Historic England on 2nd December 2024 and it was agreed that, together with condition 9(2), which addresses pre-commencement surveys, and condition 10(1), that the WSI must be submitted for approval at least four months before the intended commencement of licensed activities, the current proposed wording of condition 9(1)(f) included in the draft DCO (PD1-002) does not need further amendment. Additional clarity on the relationship between these conditions, and the delivery of the measures agreed through the WSI, will be captured in the In In Principle Monitoring Plan (IPMP), to be updated at Deadline 3, and this will be agreed between the Applicant and Historic England through a SoCG.</p>
5.2 Natural England (REP1-097 and REP1-098)		
D2-REP2035-42	<p>The MMO has reviewed Natural England's (NE) submission (document reference REP1-097). The MMO notes that NE's concerns for Fish and Shellfish Ecology have been categorised as green or yellow RAG (red, amber, green) status. The MMO has no comments on this.</p>	<p>The Applicant notes this response.</p>
D2-REP2035-43	<p>The MMO notes that NE have submitted a Principal Areas of Disagreement Summary Statement (PADSS, document reference REP1-098) in place of a SoCG. The MMO notes that the PADSS has outstanding issues regarding offshore ornithology. Specifically, the quantitative consideration of historic projects for cumulative and in-combination assessments, adverse effects on red-throated diver at Liverpool Bay, adverse effects on the lesser black-backed gull at Morecambe Bay and Duddon Estuary SPA and Ribble and Alt Estuary SPA. The MMO defers to NE on matters of ornithology. The MMO hopes to see the issues raised by NE resolved.</p>	<p>The Applicant has presented information to address the 'gap-filling' of historic projects at Deadline 1 within the Offshore Ornithology Technical Note 1 (EIA) (REP1-080) and Offshore Ornithology Technical Note 2 Habitats Regulations Assessment (HRA) (REP1-081). Both technical notes are being updated following Natural Resource Wales's (NRW's) Written Representation at Deadline 1 and will be resubmitted at Deadline 3 alongside this document (Offshore Ornithology Technical Note 1 (EIA)_Rev 02 Clean</p>

ID	Deadline 2 Submission comment	Applicant response
		<p>(Document reference 9.22) and Offshore Ornithology Technical Note 2 (HRA)_Rev 02 Clean (Document Reference 9.23)).</p> <p>Notwithstanding the disagreement between the Applicant and Natural England on the conclusions of no adverse effect on integrity in the lesser black-backed gull and red throated diver assessments for the SPAs mentioned here, the Applicant has prepared 'Without Prejudice' Derogation Cases for both of these features (Habitats Regulations Assessment Without Prejudice Derogation Case_Rev 03 Clean (Document Reference 4.11) and Without Prejudice Compensatory Measures for Red Throated Diver (Document Reference 9.37)), should the Secretary of State conclude that compensation will be required for impacts on these species as a result of the Project.</p>
D2-REP2035-44	<p>Additionally, there are outstanding issues with regard to marine mammals. NE notes that the Applicant has not made a commitment to use NAS (noise abatement systems) during construction. NE commented that 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. The MMO has provided comments regarding the use of NAS within this letter (see Table 1 - RR-047-59). The MMO advises that If the Applicant is giving any serious consideration to the use of NAS, such as DBBC then they should be presenting UWN modelling as evidence that an acceptable reduction in the range of effect from piling noise can be achieved when using NAS/DBBC. The MMO would expect this evidence to be presented as part of their Environmental Impact Assessment process, i.e., pre-consent, rather than post-consent as this should be taken into account at the time of determination.</p>	<p>The Applicant has responded to this point in ID WR-096-64 of The Applicant's Response to Written Representations (REP2-027) and discussed this with the MMO.</p> <p>The Applicant's position is that further underwater noise modelling would be undertaken, however the Applicant considers that the most appropriate and meaningful time to do this would be post-consent, after decisions have been made upon the final WTG and OSP foundation design parameters. These would inform the finalisation of the MMMP for piling (if required) and the UWSMS, through which the detail of mitigation measures would be secured.</p> <p>A MMMP (required if using pile driven foundations) which accords with the draft MMMP and follows current best practice</p>

ID	Deadline 2 Submission comment	Applicant response
		<p>advised by NE must be approved by the MMO prior to commencement of the licensed activities (in consultation with NE as appropriate) (Condition 9(1)(i) of the dML in the draft DCO). An UWSMS, which accords with the outline UWSMS, must be approved by the MMO prior to commencement of the relevant activities (Condition 20 of the dML in the draft DCO). As noted in ID WR-096-64 of The Applicant's Response to Written Representations (REP2-027) the use of NAS is included as an option in the draft MMMP and the outline UWSMS.</p> <p>Furthermore, the Applicant notes that the driver to use NAS for piling has been stated by stakeholders as anticipated changes to the European Protected Species (EPS) licencing required for relevant offshore windfarm piling activities, which have yet to be implemented by DEFRA. It may therefore prove to be duplication of another licensing regime to also include in the DCO (albeit the current proposed approach in which NAS would be secured in plans approved via dML conditions if required is considered appropriate, given the current uncertainty on the EPS regime changes).</p> <p>The Project can confirm that, in anticipation of the changes to EPS licensing, on-going detailed design for foundation installation is taking full account of the potential need for appropriate NAS to be applied to reduce impacts of underwater noise on sensitive ecological receptors from foundation piling activities.</p>

ID	Deadline 2 Submission comment	Applicant response
D2-REP2035-45	NE notes that that the assessment of impacts to benthic habitats and physical processes is incomplete. NE have requested that the Applicant provide an updated assessment of impacts on physical processes and benthic ecology that incorporates a realistic worst-case scenario for potential impacts from seabed preparation works. It is noted that the Applicant's Rule 9 response presents updated worst case scenarios but has not provided an updated assessment. The MMO is in support of NE and hopes to see the Applicant provide an updated assessment to resolve this issue.	The Applicant has incorporated the updated assessment of impacts on physical processes and benthic ecology from seabed preparation works in the following chapters, which were submitted at Deadline 2: <ul style="list-style-type: none"> Chapter 7 Marine Geology, Oceanography and Physical Processes (REP2-008 and REP2-009) Chapter 8 Marine Sediment and Water Quality (REP2-010 and REP2-011) Chapter 9 Benthic Ecology (REP2-012 and REP2-013)
D2-REP2035-46	The MMO notes the NE have raised a number of issues regarding the DCO. NE notes that there is a requirement for a Marine Mammal Mitigation Protocol (MMMP). NE advise that the condition should require inclusion of Noise Abatement Systems (NAS) within the MMMP. The MMO is reviewing all comments at this stage and will provide comments in due course.	The Applicant notes this response and will respond to any further comments provided by the MMO. See D2-REP2035-44 above.
D2-REP2035-47	NE notes that there is no pre-construction benthic, marine mammal or ornithological monitoring secured within condition 14 or post construction monitoring at condition 16. NE advise that monitoring conditions should be updated and informed by a Pre Consent In Principle Monitoring Plan. The MMO is reviewing these comments in detail and will provide an update in due course.	The Applicant notes this response and will respond to any further comments provided by the MMO.
D2-REP2035-48	With reference to Schedule 6 Part 2 Condition 9 (1) (a), NE notes that there is usually a requirement to microsite the cables around features of conservation importance as well as archaeological features. NE advise that the condition is amended to include requirement to micro-site around features of conservation importance. The MMO would welcome this update.	Whilst benthic surveys have not identified features of conservation importance, the requirement for micro-siting around Annex 1 reef (if identified in pre-construction surveys) will be secured within the draft DCO at Deadline 4.
D2-REP2035-49	With regard to Schedule 6 Part 2 Condition 9 (1) (g), NE notes that the OOMP implies that cable protection may be deployed throughout the operational life of the windfarm. NE advise that that the deployment of new areas of cable protection should be limited to within a maximum period of ten years from the start of operations. NE advise 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 OOMP. The MMO agrees with this	The Applicant defers back to their response to NE in ID WR-097-28 of The Applicant's Comments on Written Representations Appendix A: Applicant's Comments on Natural England Risk and Issue Log (REP2-028).

ID	Deadline 2 Submission comment	Applicant response
	request and notes this is usually a separate condition and can provide condition wording in due course.	The Applicant notes the addition to the outline operations and maintenance plan (OOMP) provided at Deadline 2 is useful (REP2-020). The Applicant has also amended the wording of the draft DCO to reflect the limitation for cable protection in new areas within ten years from the start of operations. This is secured by a new dML condition (Deployment of cable protection) included in the updated draft DCO submitted at Deadline 2 (REP2-002). To note, there are no benthic designated sites located within the DCO order limits.
D2-REP2035-50	With regard to Schedule 6 Part 2 Condition 10 (1), NE notes that this condition provides that most of the plans and documentation submitted in condition 15 be submitted 4 months prior to the works. NE notes that due to the size and complexity of this project this time period is not appropriate. NE request this be amended to six months prior to commencement. The MMO notes that NE is willing to discuss the required timing for each plan with the Applicant and the MMO. The MMO will provide further comments on timescales at Deadline 3. The MMO is open to discussions with both the Applicant and NE on which documents can be 4 months.	The Applicant welcomes this comment. A list of plans with proposed submission timetables has been circulated to both the MMO and NE by email for further discussion and agreement.
D2-REP2035-51	The MMO will review the comments further and may provide further comments in due course.	The Applicant notes this comment and will respond to any further comments provided by the MMO.
5.3 Natural Resource Wales (NRW) (REP1-099)		
D2-REP2035-52	The MMO notes NRW have provided comments on ornithology and marine mammals. As stated above the MMO defers to NE in relation to the ornithology but not similar issues have been raised. In relation to marine mammals NRW have similar concerns to ourselves and NE and would welcome updates from the Applicant. Yours sincerely, (Redacted)	The Applicant provided a thorough response to NRW's Written Representation in Table 2.3 of The Applicant's Comments on Written Representations (REP2-027).

Table 2.3 The Applicant's comments on Table 1 in MMOs Deadline 2 submission (REP2-035)

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
D2-REP2035-52	RR-047-01	Planning Act 2008, bp Alternative Energy Investments Ltd, Proposed Morgan Offshore Windfarm Generation Assets Order This document comprises the Marine Management Organisation's ("MMO") initial comments in respect of the above Development Consent Order application ("DCO Application") in the form of a relevant representation. This is without prejudice to any future representation the MMO may make about the DCO Application throughout the Examination process. This is also without prejudice to any decision the MMO may make on any associated application for consent, permission, approval or any other type of authorisation submitted to the MMO either for the works in the marine area or for any other authorisation relevant to the proposed development.	The Applicant notes this response. Please also note that the Development Consent Order (DCO) Application seeks authorisation for the construction, operation and maintenance of Morecambe Offshore Windfarm Generation Assets and not the proposed Morgan Offshore Windfarm Generation Assets, as described in the Marine Management Organisation (MMO) response.	The MMO confirms that the DCO seeks authorisation for the construction, operation and maintenance of Morecambe Offshore Windfarm Generation Assets and not the proposed Morgan Offshore Windfarm Generation Assets, as described in the MMO response.	The Applicant welcomes this response.
D2-REP2035-53	RR-047-02	The MMO was established by the Marine and Coastal Access Act 2009 (the "2009 Act") to make a contribution to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas.	The Applicant notes this response.	The MMO has no further comments on this point.	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
D2-REP2035-54	RR-047-03	The responsibilities of the MMO include the licensing of construction works, deposits and removals in English inshore and offshore waters and for Northern Ireland offshore waters by way of a marine licence. Inshore waters include any area which is submerged at mean high water spring ("MHWS") tide. They also include the waters of every estuary, river or channel where the tide flows at MHWS tide. Waters in areas which are closed permanently or intermittently by a lock or other artificial means against the regular action of the tide are included, where seawater flows into or out from the area.	The Applicant notes this response.	The MMO has no further comments.	
D2-REP2035-55	RR-047-04	In the case of NSIPs, the Planning Act 2008 (the "2008 Act") enables DCO's for projects which affect the marine environment to include provisions which deem marine licences. As a prescribed consultee under the 2008 Act, the MMO advises developers during pre-application on those aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction, deposit or removal within the marine area, this also includes assessing any risks to human health, other legitimate uses	The Applicant notes this response.	The MMO has no further comments.	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		of the sea and any potential impacts on the marine environment from terrestrial works.			
D2-REP2035-56	RR-047-05	Where a marine licence is deemed within a DCO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. As such, the MMO has a keen interest in ensuring that provisions drafted in a deemed marine licence ("DML") enable the MMO to fulfil these obligations. Further information on licensable activities can be found on the MMO's website here. Further information on the interaction between the Planning Inspectorate and the MMO can be found in our joint advice note 11 Annex B here.	The Applicant notes this response.	The MMO has no further comments.	
D2-REP2035-57	RR-047-06	On the 28 June the MMO received notice under Section 56 of the Planning Act 2008 (the "PA 2008") that the Planning Inspectorate ("PINS") had accepted an application made by bp Alternative Energy Investments Ltd, (the "Applicant") for a DCO Application (MMO ref: DCO/2022/00001 PINS ref: EN010121). The DCO Application includes a draft development consent order (the "DCO") and an	Noted, please also note that the Applicant here is Morecambe Offshore Windfarm Ltd and not bp Alternative Energy Investments Ltd (bp) as described, and the DCO Application seeks authorisation for the construction, operation and maintenance of Morecambe	The MMO notes that the Applicant is Morecambe Offshore Windfarm Ltd and will ensure this is reflected in future representations.	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		Environmental Statement (the "ES"). The draft DCO includes, at Schedule 6 draft Deemed Consent under Part 4 (Marine Licensing) of the Marine and Coastal Access Act 2009 (the "Deemed Marine Licence") (DML). The DCO Application seeks authorisation for the construction, operation and maintenance of Morecambe Offshore Windfarm Generation Assets located approximately 30 kilometres (km) from the Lancashire coast; comprising of up to 35 wind turbine generators, all associated array area infrastructure and all associated development ("the Project"). Please find the MMO comments below.	Offshore Windfarm Generation Assets.		
D2-REP2035-58	RR-047-07	Morecambe Offshore Windfarm Generation Assets is a proposed offshore windfarm located approximately 30 kilometres (km) from the Lancashire coast, England.	The Applicant notes this response.	The MMO has no further comments.	
D2-REP2035-59	RR-047-08	The windfarm Agreement for Lease area awarded by The Crown Estate spans 125 km ² . The proposed windfarm site development area has been reduced to approximately 87km ² . All project infrastructure will be located within the 87km ² windfarm site. The project consists of	The Applicant notes this response.	The MMO has no further comments.	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		up to 35 Wind Turbine Generators (WTGs), up to two Offshore substations (OST), their associated foundations and platform link cables. Inter-array cables. Scour protection around foundations and subsea cable protection where required.			
D2-REP2035-60	RR-047-09	One DML is included in the draft DCO. The DML relates to offshore (WTG) and Associated Infrastructure and Associated Development.	The Applicant notes this response.	The MMO has no further comments.	
Draft DCO					
D2-REP2035-61	RR-047-10	MMO has reviewed the draft DCO and provided comments below. MMO are currently undertaking a detailed review and will produce further comments on the DCO at Deadline 1 and during the course of the examination.	The Applicant notes this response and looks forward to receiving further comments on the draft DCO and Deemed Marine Licence (DML) at Deadline 1.	The MMO is reviewing all comments and the DCO and has provided additional comments in this letter. The MMO will provide further comments in due course. MMO will provide these earlier to the Applicant where possible to ensure conversations can continue outside of the written process. Further information has been provided in Section 3 of this document. Further comments will be provided at Deadline 3 on some topics.	The Applicant has responded to the MMO's comments on the draft DCO in Table 2.2 (ID D2-REP2035-13 to D2-REP2035-32) and will respond to any further comments provided by the MMO.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
D2-REP2035-62	RR-047-11	The MMO requests that the details of licensed marine activities of the DML should include exact coordinates.	Noted. The revised draft DML submitted as part of the Draft DCO at Procedural Deadline A has added exact coordinates.	The MMO welcomes this update.	The Applicant welcomes this response. No further action required.
D2-REP2035-63	RR-047-12	Section 2(d) states: 'the removal of sediment samples for the purposes of informing environmental monitoring under this licence during pre-construction, construction and operation' The MMO notes that geophysical surveys may require a separate licence. If so the wording in 2(d) must be clear that such activities are excluded from this licence	The Applicant notes that the removal of sediment samples was included in section 2 in error and, as such, this has been deleted in the revised draft DML submitted at Procedural Deadline A.	The MMO welcomes this update noting that if these surveys were assessed within the ES then this could be part of the DML, it would just have to be clear within the DML when commencement begins in relation to the surveys and when method statements would be agreed and how the conditions are worded for any submissions post consent.	The Applicant welcomes this response. No further action required.
D2-REP2035-64	RR-047-13	Section 8 states: "With respect to any condition which requires the licensed activities be carried out in accordance with the details, plans or schemes approved under this licence, the approved details, plans or schemes are taken to include any amendments that may subsequently be approved in writing by the MMO" MMO recommends that the following be included in addition: "subsequent	The Applicant considers that this additional text is not required as it is secured by paragraph 9(1) of Part 1 (Licensed marine activities of Schedule 6 (Deemed Marine Licence under the 2009 Act: Morecambe Offshore Windfarm Generation Assets) to the draft DCO (APP-012).	The MMO notes the Applicant's response. The MMO will provide further comments on this and paragraph 9(1) at Deadline 3.	The Applicant notes this comment and will respond to any further comments provided by the MMO.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		to the first approval of those plans, protocols or statements provided it has been demonstrated to the satisfaction of the MMO that the subject matter of the relevant amendments do not give rise to any materially new or materially different environmental effects to those assessed in the environmental information."			
D2-REP2035-65	RR-047-14	<p>Details of the marine license activities 9(1) states:</p> <p>"Any amendments to or variations from the approved details, plans or schemes must be in accordance with the principles and assessments set out in the environmental statement. Such agreement may only be given where it has been demonstrated to the satisfaction of the MMO that it is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement."</p> <p>Due to a lack of regulatory certainty and risk of applying lower standards than those approved in the environmental statements the above wording should be amended to the following:</p> <p>"Any amendments to or variations from the approved details, plans or</p>	<p>The Applicant does not consider that the wording proposed in paragraph 9(1) of Part 1 (Licensed marine activities of Schedule 6 (DML under the 2009 Act: Morecambe Offshore Windfarm Generation Assets) to the draft DCO (APP-012) lacks regulatory certainty or risks applying a lower standard than those approved in the Environmental Statement (ES). The proposed condition reflects the wording used in the environmental impact assessment process (of 'likely' significant effects). Additionally, the wording of paragraph 9(1) proposed by the Applicant reflects the wording used in other offshore wind precedents,</p>	<p>The MMO requests the wording of Part 1 paragraph 9 is amended.</p> <p>The MMO will provide further comments at Deadline 3.</p>	<p>The Applicant notes this comment and will respond to any further comments provided by the MMO.</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		schemes must be in accordance with the principles and assessments set out in the environmental statements. Such agreement may only be given where it has been demonstrated to the satisfaction of the MMO that it will not give rise to any materially new or materially different environmental effects from those assessed in the environmental statement."	including the Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024, the East Anglia ONE North Offshore Wind Farm Order 2022, the East Anglia TWO Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021.		
D2-REP2035-66	RR-047-15	The MMO requests that the conditions include a sediment sampling plan.	As noted in the Sediment Disposal Site Characterisation Report (APP-024), the Applicant plans to designate the entirety of the windfarm site as a disposal area. The Sediment Disposal Site Characterisation Report (APP-024) includes details on sampling that was carried out during the pre-application process. No further sampling is considered to be required. As such, the Applicant does not consider that a DML condition is required.	The MMO notes the Applicant's response. This point has been discussed in meetings held with the Applicant and the MMO. The MMO intends to work with the Applicant to designate a disposal area and has requested shape files of the locations.	The Applicant welcomes this response. No further action required.
D2-REP2035-67	RR-047-16	The MMO requests that a reporting condition in relation to 'Reporting of Impact Pile Driving/Detonation of	Noted. The Applicant has added a new condition 19 (Marine Noise Registry) in the DML submitted with the	The MMO welcomes this update in regard to impact pile driving and agrees with the removal	The Applicant notes this response and will respond to any further comments provided by the MMO.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		Explosives' for reporting to the Marine Noise Registry is included.	updated draft DCO at Procedural Deadline A. As unexploded ordnance clearance and detonation of explosives are not licensable activities for the purposes of the application, the proposed reporting condition is in only in relation to pile driving.	of detonations of explosives. Further discussion has taken place with the Joint Nature Conservation Committee (JNCC) in relation to the noise registry conditions and we are just confirming if a slightly updated condition needs to be included in DMLs. Once we have this information we will provide this to the Applicant and request this is updated as part of the Examination.	
D2-REP2035-68	RR-047-17	Condition 2(3) states: "No maintenance works authorised by this licence may be carried out until an offshore operation and maintenance plan substantially in accordance with the outline offshore operation and maintenance plan has been submitted to and approved by the MMO in writing" The MMO notes that whilst it is helpful that the maintenance plan must be approved by the MMO, it does not indicate that the maintenance works should be undertaken in accordance with this.	Noted. This has been added (with a minor change to refer to the 'offshore operation and maintenance plan' to reflect the document title) as a new sub-paragraph (4) to Condition 2 of the DML submitted with the updated draft DCO at Procedural Deadline A.	The MMO welcomes this update.	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		The MMO request that the additional wording is included for confirmation: "All maintenance works must be carried out in accordance with the approved operations and maintenance plan unless otherwise agreed in writing by the MMO."			
D2-REP2035-69	RR-047-18	Condition 7(6) states: "The undertaker must ensure that any rock material used in the construction of the authorised project is from a recognised source, free from contaminants and containing minimal fines." The MMO requests the following is included in addition: "Details of the source of the rock materials to be used must be submitted to the MMO at least six weeks prior to the commencement of the licenced activity. The licenced activity (or specific activity) must not commence until written approval is provided by the MMO"	The Applicant does not consider that condition 7(6) requires to be updated. The wording of condition 7(6) reflects the wording used in other offshore wind precedents, including the Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024, the East Anglia ONE North Offshore Wind Farm Order 2022, the East Anglia TWO Offshore Wind Farm Order 2022, the Norfolk Vanguard Offshore Wind Farm Order 2022 and the Norfolk Boreas Offshore Wind Farm Order 2021.	The MMO notes the Applicant's response and will provide an update at Deadline 3.	The Applicant notes this response and will respond to any further comments provided by the MMO.
D2-REP2035-70	RR-047-19	Condition 7(10) states: "All dropped objects which may reasonably be expected to cause a hazard in the marine environment must be reported to the MMO using the Dropped Object Procedure Form as soon as reasonably practicable	The Applicant does not consider that condition 7(10) requires to be updated. Noting that the MMO's preferred wording has been included in several offshore wind DMLs, the Applicant	The MMO notes the Applicant's response and will provide an update at Deadline 3.	The Applicant notes this response and will respond to any further comments provided by the MMO.

ID	Ref. from PD1- 011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>and in any event within 24 hours of the undertaker becoming aware of an incident. On receipt of the Dropped Object Procedure Form the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so."</p> <p>The MMO requests condition 7(10) is amended to the following: "(1) The undertaker must report all dropped objects to the MMO using the dropped object procedure form as soon as reasonably practicable and in any event within 24 hours of becoming aware of an incident.</p> <p>(2) On receipt of the dropped Object Procedure Form, the MMO may require, acting reasonably, the undertaker to carry out relevant surveys. The undertaker must carry out surveys in accordance with the MMO's reasonable requirements and must report the results of such surveys to the MMO.</p> <p>Receipt of such survey results, the MMO may, acting reasonably, require the undertaker to remove specific obstructions from the seabed. The undertaker must carry out removals of specific obstructions from the</p>	<p>considers that the wording proposed by the MMO is too wide. It places an unnecessary burden on the Applicant to report even minor, immaterial instances of dropped objects. The Applicant considers a pragmatic and proportionate approach must be taken and only considers dropped objects which may reasonably be expected to cause a hazard in the marine environment to be those to which the MMO's dropped objects procedure should apply.</p>		

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		seabed in accordance with the MMO's reasonable requirements and at its own expense."			
D2-REP2035-71	RR-047-20	<p>The MMO does not consider that condition 8 Force majeure is necessary as it duplicates section 86 of the 2009 Act. The defence under Section 86 of MCAA has two limbs, and in the event that the undertaker fails to notify the appropriate licensing authority, in this case the MMO, within a reasonable time of their actions (Section 86(2) "matters") the defence cannot be relied upon in the event of any enforcement action. Therefore, the MMO recommends that this condition should be removed.</p> <p>In the event that you maintain that the proposed provision does not duplicate Section 86 MCAA and instead introduces a reporting requirement which did not previously exist, the MMO require that it should be made clear that this provision is in addition to Section 86 and its requirements. If this is included the follow paragraph must also be included:</p> <p>"The unauthorised deposits must be removed at the expense of the undertaker unless written approval is obtained from the MMO."</p>	<p>Condition 8 (force majeure) serves a slightly different purpose to section 86 of the Marine and Coastal Access Act 2009. Condition 8 imposes a duty on the undertaker to notify the MMO of the circumstances of such a deposit. This ensures that the MMO is provided with that information. Section 86 of the 2009 Act does not contain any such duty. It simply acts as a defence in the event a person is charged with an offence. The Applicant has added a new sub-paragraph (2) to include the wording proposed by the MMO in the version of the DML submitted with the updated draft DCO at Procedural Deadline A.</p>	<p>The MMO welcomes the update to the condition, the MMO is still discussing the including of this condition and will provide further comments at Deadline 3.</p>	<p>The Applicant notes this response and will respond to any further comments provided by the MMO.</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
D2-REP2035-72	RR-047-21	The MMO requests that the inclusion of archaeological reports in within condition 9. The correct statutory historical body should be included as well as details of what the report should include.	Condition 9(1)(f) (pre-construction plans and documentation) requires the submission and approval of an offshore archaeological Written Scheme of Investigation (WSI) (in accordance with the outline offshore WSI (APP-154)). This includes archaeological reports (sub-paragraph (vii)) and also makes provision for Historic England to be notified (sub-paragraph (vi)). The Applicant does not consider that any further text is needed.	The MMO notes the Applicant's response and the inclusion of this condition. The MMO has no further comments at this time.	The Applicant welcomes this response. No further action required.
D2-REP2035-73	RR-047-22	Condition 13 states: "The undertaker must provide the following information in writing to the MMO— (a) the name, function, company number (if applicable), registered or head office address (as appropriate) of any agent or contractor appointed to engage in the licensed activities within seven days of appointment; and (b) each week during the construction of the authorised project a completed Hydrographic Note H102 listing the vessels currently and to be used in relation to the licensed activities."	The Applicant has amended condition 13 to reflect the wording that the MMO has proposed, subject to other amendments made for consistency with the existing text of condition 13. This has been incorporated in the version of the DML submitted with the updated draft DCO at Procedural Deadline A.	The MMO welcomes this update.	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>The MMO suggests the condition 13(1) is amended to the following for clarity: "The undertaker must provide the name, address and function of any agent, contractor or subcontractor that will carry out any licenced activity listed in this license on behalf of the undertaker to the MMO in writing no less than 24 hours before the agent, contractor or subcontractor carries out any licensed activity.</p> <p>Any changes to the name and function of the specified agent, contractor or subcontractor that will carry out the specified licenced activities must be notified to the MMO in writing prior to the agent, contractor or subcontractor carrying out the licensed activity.</p> <p>The undertaker must ensure that a copy of this licence and any subsequent revisions or amendments has been provided to any agents, contractors or subcontractors that will carry out the licensed activity on behalf of the undertaker prior to them carrying out any licensed activity."</p>			
D2-REP2035-74	RR-047-22	<p>Condition 13 states:</p> <p>"The undertaker must provide the following information in writing to the MMO—</p>	<p>The Applicant has amended condition 13 to reflect the wording that the MMO has proposed, subject to other amendments made for consistency with the existing</p>	<p>The MMO welcomes this update.</p>	<p>The Applicant welcomes this response. No further action required.</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>(a) the name, function, company number (if applicable), registered or head office address (as appropriate) of any agent or contractor appointed to engage in the licensed activities within seven days of appointment; and</p> <p>(b) each week during the construction of the authorised project a completed Hydrographic Note H102 listing the vessels currently and to be used in relation to the licensed activities."</p> <p>The MMO suggests the condition 13(1) is amended to the following for clarity: "The undertaker must provide the name, address and function of any agent, contractor or subcontractor that will carry out any licenced activity listed in this license on behalf of the undertaker to the MMO in writing no less than 24 hours before the agent, contractor or subcontractor carries out any licensed activity.</p> <p>Any changes to the name and function of the specified agent, contractor or subcontractor that will carry out the specified licenced activities must be notified to the MMO in writing prior to the agent, contractor or subcontractor carrying</p>	<p>text of condition 13. This has been incorporated in the version of the DML submitted with the updated draft DCO at Procedural Deadline A.</p>		

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		out the licensed activity. The undertaker must ensure that a copy of this licence and any subsequent revisions or amendments has been provided to any agents, contractors or subcontractors that will carry out the licensed activity on behalf of the undertaker prior to them carrying out any licensed activity."			
D2-REP2035-75	RR-047-23	The provisions under article 7 Benefit of the Order are of concern to the MMO. The MMO requests that any reference to the MMO and DML should be removed from this article for transfer of the benefit of the DCO.	Article 7 of the draft DCO (APP-012) contains provisions for the transfer or lease of the provisions under the DCO. As set out in the Explanatory Memorandum (APP-013), these provisions are based on the Model Provisions, and the drafting has developed through the inclusion of a similar article in many offshore wind farm development consent orders. Following the precedent drafting from other offshore wind farm orders, Article 7(2) provides the transfer or grant of DCO powers to take place with the written consent of the Secretary of State (SoS) and for this transfer or grant to take place without the need for consent in the circumstances specified in	The MMO has concerns regarding the transfer of the Benefit of the Order. See section 3.1 of this letter.	The Applicant has responded above (ID D2-REP2035-25) in Table 2.2.

ID	Ref. from PD1- 011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			<p>paragraph 7(5). Both of the circumstances set out in Article 7(2) allow for the transfer or grant of powers under the DML. Article 7(3) requires the Secretary of State to consult with the MMO before giving consent to the transfer or grant to another person of the benefit of the DML. This ensures that the MMO has the opportunity to participate in any decision to transfer or lease made under Article 7.</p> <p>Article 7(11) disapplies sections 72(7) and (8) of the Marine and Coastal Access Act 2009 in relation to a transfer or grant of the benefit of the DML. The drafting in the draft DCO reflects a long-established precedent regarding the transfer of DCO powers and deemed marine licences that has been endorsed by the SoS many times, including most recently in the Sheringham Shoal and Dudgeon Extensions Offshore Wind Farm Order 2024. Where a transfer of the DML is sought under</p>		

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			<p>Article 7(2), the Secretary of State would consider the appropriateness of the party to whom the transfer or grant is proposed and would also take into account any representations made by the MMO before determining whether to grant consent.</p> <p>From a procedural perspective it is important that the DCO and the DML can be transferred together using the process set out in Article 7. It is considered important that the timing of any transfer or grant of powers/authorisations under the DCO and DML be aligned, as there is considerable overlap between the authorisations and the requirements/conditions. In practice, the most common transfer scenario is when the offshore transmission infrastructure is transferred to the separate Offshore Electricity Transmission (OFTO) licence-holder following a public tender exercise via Ofgem, and it is important that an OFTO</p>		

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			licence-holder have certainty that all consents, licences and permits will transfer concurrently via the same approval process.		
D2-REP2035-76	RR-047-24	The MMO does not accept that arbitration clauses should apply to the organisation this would circumnavigate the existing statutory provisions within the 2009 Act. The MMO requires the following be included in addition: "For the avoidance of doubt any matter for which the consent or approval of the Secretary of state or the Marine Management Organisation is required under any provision of this Order is not subject to arbitration."	This text is already included in Article 15(2) (arbitration) of the draft DCO (APP-012). Schedule 5 (arbitration rules) only applies to matters that are subject to arbitration pursuant to Article 15, which does not include matters which fall within the remit of the MMO. The Applicant does not consider any further changes are required.	The MMO notes the Applicant's response. The MMO has no further comments at this time.	The Applicant welcomes this response. No further action required.
D2-REP2035-77	RR-047-25	This section applies to all 'discharging authorities' which are defined as "the body responsible giving any consent, agreement or approval required by a requirement included in Part 2 (requirements) of Schedule 2". It is not clear whether the MMO would be responsible for giving any of these approvals. If the MMO would constitute a discharging authority, the MMO has concerns regarding the Part 3 Schedule 4 Approval of matters specified in requirements	As provided in Article 14 (requirements, appeals, etc.), Schedule 4 (approval of matters specified in requirements) only has effect in relation to agreements or approvals in connection with the requirements set out in Schedule 2 (requirements). Article 14, and by extension Schedule 4, do not apply to the DML or any conditions therein.	The MMO welcomes this clarification and has no further comments at this stage	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		applications, which requires the discharging authority to give notice of its decision on an application within a fixed period, and schedule 5 appeals procedure, which the MMO are concerned may conflict with of seek to circumnavigate existing procedures for appeals within the 2009 Act.	<p>The MMO does not constitute a discharging authority for any of the DCO requirements in Part 2 (requirements) of Schedule 2 and, accordingly, Article 14 and Schedule 4 do not apply to the MMO.</p> <p>The Applicant notes the reference to "schedule 5 appeals" and presumes this should be a reference to "schedule 5 arbitration rules". Reference is made to response RR-047-24 above which confirms that Schedule 5 does not apply to the MMO.</p>		
Draft MMMP (APP-149) and Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment (APP-067)					
D2-REP2035-78	RR-047-26	In paragraph 79 of the draft (MMMP) it states, "Bubble curtains could be deployed for UXO detonation; however, it should be noted that there are likely to be limits to the environmental conditions within which they are able to provide effective mitigation". The MMO and Cefas note that bubble curtains will be a mandatory requirement for any high-order clearance operations.	<p>The Applicant acknowledges the requirement for bubble curtains for high order Unexploded Ordnance (UXO) clearance.</p> <p>Mitigation for UXO clearance would be agreed via a separate marine licence for UXO clearance in accordance with mandatory requirements, noting that there are limits to the environmental conditions in which bubble curtains can be</p>	<p>The MMO notes the Applicant's response.</p> <p>The Applicant and MMO have held meetings where the UXO clearance has been discussed.</p> <p>The Applicant has confirmed that the UXO clearance will be developed post-consent as part of separate</p>	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			deployed to ensure the effectiveness.	investigations and clearance licences. The MMO is content with this approach.	
D2-REP2035-79	RR-047-27	<p>Further, Section 3.1.4 paragraph 143 regarding breaks in piling states “for any breaks in piling of less than 10 minutes, piling may continue as required (i.e. as if there was no break). For any breaks in piling of more than 10 minutes, but less than two hours, then the piling can recommence with a reduced soft-start procedure (e.g. five to six blows of the hammer at the starting hammer energy) before continuing as required, provided there are no marine mammals within the Management Area”.</p> <p>The JNCC (2010) guidance recommends that if there is a pause in piling operations for a period of greater than 10 minutes, then the pre-piling search and soft-start procedure should be repeated before piling recommences. If a watch has been kept during the piling operation, the Marine Mammal Observer or Passive Acoustic Monitoring Operative should be able to confirm the presence or absence of marine mammals, and it may be possible to</p>	<p>The Applicant acknowledges the request, however notes that the wording proposed by the Applicant has previously been agreed for other offshore windfarm projects, including Dogger Bank A and Dogger Bank B.</p> <p>The Applicant notes finalisation of wording in the Marine Mammal Mitigation Protocol (MMMP) would be undertaken post-consent alongside developed Project design information, in the event that piled foundations are selected as part of detailed design for the Project.</p>	<p>The MMO acknowledges that the final wording in the MMMP would be undertaken post-consent. The MMO alongside Cefas will be happy to review the finalised MMMP to ensure potential impacts are appropriately mitigated. The MMO will provide further comment at Deadline 3.</p>	<p>The Applicant notes this response and will respond to any further comments provided by the MMO.</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		commence the soft-start immediately. However, if there has been no watch, the complete pre-piling search and soft-start procedure should be undertaken. The guidance recommends that the soft-start duration should be a period of not less than 20 minutes. Any requested variation from a 20-minute soft-start should be agreed with the relevant agency and regulator. The MMO and Cefas request that the guidance is adhered to, and the full soft start is implemented (not 5 to 6 blows at the starting hammer energy as is proposed in the MMMP).			
D2-REP2035-80	RR-047-28	Table 3.1 in the MMMP presents cumulative sound exposure Level (SELcum) modelled impact ranges for piling of both monopile and pin-pile at the worst- case (south west) location. The MMMP refers the reader to Appendix 11.1 of the ES (Document Reference 5.2.11.1) for more details, which describes the underwater modelling undertaken. Please note that the impact ranges presented in Table 3.1 are vastly different to those presented in Appendix 11.1 (see Table 4-22 in Appendix 11.1 for example which presents the impact ranges for monopiles and Annex 7.1 and 7.2 of	Table 3.1 in the draft MMMP (APP-149) lists the worst-case impact ranges for the Project based on the maximum strike rate scenario listed in Appendix B of Appendix 11.1 Underwater Noise Assessment (APP-065) and would be the worst-case impact range to be mitigated. There is no discrepancy, but it is noted that Appendix 11.1 Underwater Noise Assessment (APP-065) also presents the lower strike rate scenario.	The MMO and Cefas previously noted that the predicted ranges in Table 3.1 of the MMMP are vastly different to those presented in Appendix 11. The MMO and Cefas recommended that these discrepancies should be checked and clarified. The Applicant has clarified with the MMO that additional modelling was completed for a higher strike rate. The MMO welcomes this clarification.	The Applicant has updated Paragraph 94 of the Draft MMMP which was submitted at Deadline 2 (REP2-018 and REP2-019). The Applicant will make this clear in all other marine mammal documents and anticipates to submit an updated Chapter 11 Marine Mammals at Deadline 4.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		this document). These discrepancies must be checked and clarified.		The MMO requests that this is made clear in an updated version of the Draft MMMP and will review the updated version of the document when submitted by the Applicant.	
D2-REP2035-81	RR-047-29	With regard to Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment, the MMO and Cefas note a minor discrepancy. In Table 4.8 and 4.9, the PTS (permanent threshold shift) and TTS (temporary threshold shift) criteria for UXO (unexploded ordnance) are based on the SPL _{peak} (peak sound pressure level) metric, and the SEL _{ss} (single strike sound exposure level) metric, not the SEL _{cum} .	Noted, the error in the heading has been updated in The Applicant's Errata Sheet (Document Reference 8.4), submitted alongside this document at Procedural Deadline A.	The MMO notes the Applicant's update. Regarding section 5.2.11.3 in Appendix 11.3 Marine Mammal Unexploded Ordnance (UXO) Assessment, the Error is noted as "Table 4.8 and Table 4.9, the PTS (permanent threshold shift) and TTS (temporary threshold shift) metric should be Sound Exposure Level (SPL) _{peak} and SEL _{ss} , not SEL _{cum} ". The Correction is noted as "The column header in Table 4.8 Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment (APP-067) is corrected as follows: 'PTS Sound Exposure Level from Single Strike (SEL _{cum} peak)' The	As per the response to ID WR-096-108 in of The Applicant's Comments on Written Representations (REP2-027), the Appendix submitted at Deadline 1 (REP1-046 and REP1-047) was incorrectly amended, and an updated version is anticipated to be submitted alongside updates to Chapter 11 Marine Mammals at Deadline 4.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				<p>column header in Table 4.9 is corrected as follows: 'TTS SELcumss' This error does not affect outputs or assessment conclusions".</p> <p>The MMO believes that the original Error has been misinterpreted, and subsequently the correction does not make sense. For instance, there is no such metric as the 'SELcumpeak' or 'SELcumss'. For clarity, in previous advice (section 3.2 of the MMO's RR, RR-047), the MMO highlighted that the PTS and TTS criteria (in Tables 4.8 and 4.9) for UXO are based on the are based on the peak sound pressure level (SPLpeak) metric, and the single strike sound exposure level (SELss) metric, and not the cumulative sound exposure level (SELcum). Therefore, in terms of the Correction, the only change required in Table 4.8 is that the</p>	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				middle column should be referring to the SELss (i.e., 'PTS Sound Exposure Level (SELss)', rather than 'PTS Sound Exposure Level from cumulative exposure (SELcum)'. Likewise, in Table 4.9, the middle column should be referring to the SELss for TTS (and not the SELcum). However, the MMO agrees that this error does not affect the outputs or assessment conclusions.	
D2-REP2035-82	RR-047-30	Further, Table 5-1 confirms that 616 individual harbour porpoise are at risk of PTS during high-order detonation (353.6 kg Net Explosive Quantity (NEQ) plus donor charge) but this has been assessed as having a 'Medium' magnitude. For Low-Order clearance, 7 individual harbour porpoise are at risk of PTS, and this has also been assessed as having 'Medium' magnitude. The MMO and Cefas question whether 'Medium' magnitude is appropriate for the high order assessment. The MMO and Cefas understand that this scoring is based on the fact that 1% of the reference population is	Noted, 0.986% will be rounded up to 1% and the magnitude will be amended from medium to high. This will be updated accordingly in a separate technical note to be submitted at Deadline 1. It is noted that the precautionary change in magnitude from medium to high would not change the overall significance and conclusions of the assessment.	The MMO is content that the information provided satisfies the issue previously raised. However, the MMO requests that the Applicant clarifies to the MMO if this will also be updated in the technical note or just the Errata sheet.	The Applicant will incorporate the updated assessment in an updated Chapter 11 Marine Mammals anticipated for submission at Deadline 4.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		anticipated to be exposed (which is 0.986 % of the Celtic and Irish Sea (CIS) Management Unit (MU) according to Table 5-1).			
D2-REP2035-83	RR-047-31	Following on from the previous point, the MMO and Cefas also question the Magnitude scoring in Table 5.2. Table 5-2 confirms that 2,037 individual harbour porpoise are at risk of TTS during high order detonation, but this has been assessed as only having a 'Low' magnitude (with 3.3 % of the CIS MU anticipated to be at risk of TTS).	As outlined in Appendix 11.3 Marine Mammal UXO Assessment (APP-067) Table 4.3 the definition of impact magnitude for a marine mammal receptor, a 3.3% population level impact falls within the 'Low' magnitude category for an intermittent and temporary effect.	<p>The MMO questioned the Magnitude scoring in Table 5.2. Table 5-2 confirmed that 2,037 individual harbour porpoise are at risk of TTS during high-order detonation, but this has been assessed as only having a 'Low' magnitude (with 3.3 % of the Celtic and Irish Sea (CIS) Management Unit) anticipated to be at risk of TTS).</p> <p>The Applicant confirms that the 3.3% population level impact does fall within the 'Low' magnitude category for an intermittent and temporary effect. Nonetheless, the MMO maintains that 2,037 individual harbour porpoise at risk of TTS is not an insignificant number.</p>	As per the response to ID WR-096-110 of The Applicant's Response to Written Representations (REP2-027), the Applicant notes the MMO's position, and further highlights that the assessment is in line with the methodology used. The EIA identifies no significant impacts. However, it is noted that UXO clearance, if required, would be determined under a separate marine licence application where mitigation would be agreed, noting low order clearance would be undertaken where possible in acknowledgement of the residual effects.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
D2-REP2035-84	RR-047-32	With regard to Section 5.2, 'Disturbance from underwater noise associated with UXO clearance', Cefas and the MMO do not support the use of TTS as a proxy for disturbance. Therefore, the MMO and Cefas disagree with paragraph 84 that "the use of the TTS threshold was appropriate for UXO disturbance because the noise from the UXO explosion would be only fleetingly in the environment". TTS constitutes a temporary reduction in the sensitivity of the auditory system. The characteristics of TTS are distinct from behavioural disturbance, in which an animal changes its behaviour in response to a stimulus. There is no cognitive impairment implicit in behavioural responses. TTS typically occurs at much higher sound exposures than the onset of behavioural disturbance, and so if behavioural disturbance is assumed to occur only at sound exposures where TTS would occur, this is likely to significantly underestimate the risk of disturbance.	There are no agreed thresholds for the onset of a behavioural response from underwater noise generated by explosions during UXO clearance activities. Empirically-derived relationships between noise levels and the probability of a response to pile driving noise (i.e. the 26km Effective Deterrence Radius (EDR)) are not appropriate to apply here due to the very different nature of the sound. Other assessments of UXO clearance activities have used the Temporary Threshold Shift (TTS)-onset threshold to indicate the level at which a 'fleeing' response may be expected to occur in marine mammals. This is a result of discussion in Southall <i>et al.</i> (2007) which states that in the absence of empirical data on responses, the use of the TTS-onset threshold may be appropriate for single pulses (like UXO detonation): "Even strong behavioural responses to single pulses, other than those that may	The MMO appreciates and acknowledges that there are no agreed thresholds for the onset of a behavioural response from underwater noise, especially for explosions during UXO clearance activities. Other assessments of UXO clearance activities may have used (or proposed) the TTS-onset threshold to indicate the level at which a 'fleeing' response may be expected to occur in marine mammals. Nonetheless, the MMO requests regarding the assessment of TTS have been consistent. We agree that Southall <i>et al.</i> (2007) state that the onset of significant behavioural disturbance is proposed to occur at the lowest level of noise exposure that has a measurable transient effect on hearing (i.e., TTS-onset), recognising that this is not a	As per the response to ID WR-096-111 and WR-096-112 of The Applicant's Response to Written Representations (REP2-027), given the lack of agreed thresholds, the Applicant maintains that the use of TTS provides a suitable assessment to consider the effects of any potential UXO clearance. However, as a separate Marine Licence will be made for any Unexploded ordnance (UXO) clearance, the Applicant will consider the suggestions made by the MMO and continue to engage on the use of Effective Deterrent Ranges (EDRs) in any necessary UXO clearance marine licence Application, which would also inform the appropriate mitigation.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			<p>secondarily result in injury or death (e.g., stampeding), are expected to dissipate rapidly enough as to have limited long-term consequence. Consequently, upon exposure to a single pulse, the onset of significant behavioural disturbance is proposed to occur at the lowest level of noise exposure that has a measurable transient effect on hearing (i.e., TTS-onset). We recognize that this is not a behavioural effect per se, but we use this auditory effect as a de facto behavioural threshold until better measures are identified. Lesser exposures to a single pulse are not expected to cause significant disturbance, whereas any compromise, even temporarily, to hearing functions has the potential to affect vital rates through altered behaviour" (Southall <i>et al.</i>, 2007). Therefore, an estimation of the extent of behavioural disturbance is based on the sound levels at which the onset of TTS is</p>	<p>behavioural effect per se. Thus, the MMO maintains our current position that the characteristics of TTS are distinct from behavioural disturbance, in which an animal changes its behaviour in response to a stimulus. TTS typically occurs at much higher sound exposures than the onset of behavioural disturbance, and so if behavioural disturbance is assumed to occur only at sound exposures where TTS would occur, this is likely to significantly underestimate the risk of disturbance. Furthermore, behavioural responses to noise are highly variable and depend on numerous factors, including the species, individual differences, context of the noise exposure, and the animal's previous experiences. Thus, behavioural responses are influenced by a</p>	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			<p>predicted to occur from impulsive sounds. TTS thresholds are taken as those proposed for different functional hearing groups by Southall <i>et al.</i> (2019).</p> <p>It is noted that UXO clearance is not part of the DCO Application and assessment was provided for information, noting a marine licence application for UXO clearance, if required, would be made separate from the DCO Application.</p>	<p>combination of physiological, psychological, and environmental factors, and the mechanisms driving these responses are different (compared to TTS).</p> <p>The MMO notes UXO is not part of the DCO Application but the assessment should be accurate and reflect the best available evidence at this stage.</p>	
D2-REP2035-85	RR-047-33	<p>To quantify the risk of behavioural responses where there are no better alternatives, the effective deterrence ranges (EDRs) in place for noise management in harbour porpoise Special Areas of Conservation (SACs) could be used instead. Since harbour porpoise are relatively skittish and sensitive to underwater noise, the EDRs are likely to be conservative for other marine mammal species and are therefore a suitably precautionary option in the absence of other data (unlike using TTS as a proxy for disturbance). Thus, the MMO and Cefas welcome that the 26km EDR, as per the Statutory Nature Conservation</p>	<p>The Applicant acknowledges this response, noting, as stated in the draft MMMP (APP-149), the final MMMP for UXO clearance would be submitted for approval under a future marine licence application, separate from the DCO Application.</p> <p>As outlined in Southall <i>et al.</i> (2021) thresholds that attempt to relate single noise exposure parameters (e.g., received noise level) and behavioural response across broad taxonomic grouping and</p>	<p>Please refer to MMO comments for RR-047-32.</p> <p>Additionally, the MMO agrees with the Applicant that applying an EDR (Effective Deterrent Range) for harbour porpoise to other species is deemed to be conservative).</p> <p>However, the MMO maintains that this would be a suitable precautionary option in the absence of other data (and a useful starting</p>	<p>As per the response to ID WR-096-111 and WR-096-112 of The Applicant's Response to Written Representations (REP2-027), given the lack of agreed thresholds, the Applicant maintains that the use of TTS provides a suitable assessment to consider the effects of any potential UXO clearance. However, as a separate Marine Licence will be made for any Unexploded ordnance (UXO) clearance, the Applicant will consider the suggestions made by the MMO and continue to engage on the use of Effective Deterrent Ranges (EDRs) in any</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		Bodies (SNCB) guidance (JNCC <i>et al.</i> , 2020) has also been considered in the assessment for harbour porpoise and disturbance. A 5km potential disturbance range for low-order clearance, for all marine mammal species, has also been considered (JNCC, 2023) and includes vessels associated with the activity.	sound types could lead to severe errors in predicting effects. Differences between species, individuals, exposure, situational context, the temporal and spatial scales over which they occur, and the potential interacting effects of multiple stressors could lead to inherent variability in the probability and severity of behavioural responses. The 26km EDR is based on harbour porpoise disturbance for piling activities and is also used for high order clearance "despite there being no empirical evidence of harbour porpoise avoidance" (JNCC <i>et al.</i> , 2020). Consequently, this EDR may not accurately represent UXO clearances. Applying this EDR to other species is deemed overly conservative and could lead to an overestimate of potential effect for other species. TTS has been used as a proxy for disturbance for assessing disturbance from high order UXO clearance for species where there is no	point), given the uncertainties surrounding the use of TTS as a proxy for disturbance. Furthermore, EDRs are designed to reflect the distances at which marine mammals are likely to exhibit behavioural changes in response to noise. The MMO does appreciate that the EDR for piling has been used as a proxy for explosions in the JNCC (2020) guidance, despite there being no empirical evidence of harbour porpoise avoidance. The MMO would highlight that the JNCC is currently working alongside SNCBs and the Department for Environment, Food and Rural Affairs (DEFRA) to review the EDRs.	necessary UXO clearance marine licence Application, which would also inform the appropriate mitigation.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			recommended EDRs such as for dolphins, for other offshore windfarm projects such as Seagreen Offshore Wind Farm, Sheringham and Dudgeon Extension Projects, and Dogger Bank South Offshore Wind Farm Projects.		
D2-REP2035-86	RR-047-34	<p>Additionally, Section 5.2, paragraph 90 states "In addition, the MMMP for UXO clearance will include ADD (acoustic deterrent device) activation prior to all UXO clearances, to ensure marine mammals are beyond the maximum potential impact range for PTS". There is no certainty or guarantee that animals will be deterred beyond the maximum impact ranges. In fact, the assessment later highlights in para 98 that "as per ADD review in the JNCC report No. 615 (McGarry <i>et al.</i>, 2022), the ranges of deterrence distances can vary significantly from only a few meters to several kilometres (approximately 6km for VHF cetacean); these differed between devices and dependent on the acoustic properties of the environment (Rosemeyer <i>et al.</i>, 2021)". Although an indicative assessment has been provided, the MMO and Cefas request that the</p>	<p>The Applicant acknowledges this response, noting, as stated in the draft MMMP (APP-149), the final MMMP for UXO clearance would be submitted for approval under a future marine licence application, separate from the DCO Application. The Applicant will apply this advice when reviewing mitigation measures during the submission of the UXO clearance marine licence once further details of the proposed UXO works are known.</p>	<p>The MMO acknowledges that the final MMMP for UXO clearance would be submitted under a future marine licence application. The MMO may provide further comments at Deadline 3 to assist with the marine licence application.</p>	<p>The Applicant notes this response and will respond to any further comments provided by the MMO.</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		ADD activation times (and mitigation in general) are revisited once further details of the proposed UXO works are known.			
Outline PEMP (APP-146) and IPMP (APP-148)					
D2-REP2035-87	RR-047-35	The MMO and Cefas do not have any major comments on the Outline Project Environmental Management Plan (PEMP).	The Applicant notes this response.	The MMO has nothing to add at this stage but may require minor updates in relation to chemicals and will provide an update at Deadline 3.	The Applicant notes this response and will respond to any further comments provided by the MMO, if required.
D2-REP2035-88	RR-047-36	The MMO and Cefas welcome further assessment be conducted prior to construction, based on the foundation type and installation method, to determine if there is the risk of significant disturbance to marine mammals. This would then be used to determine if further mitigation measures which reduce sound propagation and disturbance are required. If they are required, then a review would be conducted to determine what is the most appropriate and effective method based on the latest and available methods prior to construction. This would include a review of all suitable noise abatement measures at that time.	Noted, confirmation of requirements for mitigation would be agreed post-consent during the finalisation of the MMMP which is secured in Condition 9(1)(i) of Schedule 6 of the Draft DCO (APP-012). The Applicant is planning appropriately for the potential requirement for noise abatement systems (NAS), and this will be one of the options considered when developing the MMMP.	The MMO notes the Applicant's response. The MMO and Cefas are content that the information provided satisfies the previous issue raised. The MMO may provide further comments in due course.	The Applicant notes this response and will respond to any further comments provided by the MMO, if required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
D2-REP2035-89	RR-047-37	The MMO and Cefas does not have any major comments in regard to the In Principle Monitoring Plan (IPMP).	The Applicant notes this response.	The MMO has no further comments.	The Applicant welcomes this response. No further action required.
D2-REP2035-90	RR-047-38	The MMO and Cefas welcome that the final design and scope of monitoring will be agreed with the relevant stakeholders and included within the final Monitoring Plan submitted for approval.	Noted, confirmation of requirements for monitoring would be agreed post-consent during the finalisation of the Monitoring Plan.	The MMO notes the Applicant's response.	The Applicant welcomes this response. No further action required.
D2-REP2035-91	RR-047-39	Regarding potential disturbance resulting from underwater noise during piling activities, Table 2.3 states that in order to test key areas within the ES and Report to Inform Appropriate Assessment (RIAA), the purpose of this potential monitoring would be to research the behavioural response of marine mammals to different construction activities, including from mitigations (e.g. ADDS). This could be undertaken through either acoustic methods or through visual methods during Project required mitigation (e.g. Marine Mammal Observers (MMO) and Passive Acoustic Monitoring (PAM)).	Noted, confirmation of requirements for monitoring would be agreed post-consent during the finalisation of the Monitoring Plan.	The MMO notes the Applicant's response.	The Applicant welcomes this response. No further action required.
General comments					
D2-REP2035-92	RR-047-40	The MMO has focused its review on the following chapters of the Morecambe Offshore Windfarm:	Noted, detailed responses are outlined below per chapter.	Noted.	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>Generation Assets, Environmental Statement, volume 5.</p> <p>5.1.1 Volume 5 – Chapter 1 – Introduction 5.1.5 Volume 5 - Chapter 5 – Project Description 5.1.7 Volume 5 – Chapter 7 – Marine Geology, Oceanography and Physical Processes 5.1.9 Volume 5 – Chapter 9 – Benthic Ecology 5.1.10 Volume 5 – Chapter 10 – Fish and Shellfish Ecology 5.1.11 Volume 5 - Chapter 11 - Marine Mammals 5.1.12 Volume 5 - Chapter 12 - Offshore Ornithology 5.1.13 Volume 5 - Chapter 13 - Commercial Fisheries</p>			
Chapter 7 Marine Geology, Oceanography and Physical Processes (APP-044)					
D2-REP2035-93	RR-047-41	<p>The MMO has noted that the approximate number of Wind Turbine Generators (WTGs) that will comprise the Morecambe offshore windfarm is a crucial piece of information that is missing from the introduction of the environmental statement (document 5). The MMO understands from the project introduction document the project could comprise 30 'larger' or up to 35 'smaller' WTGs. We recommend these key findings should be provided early in the introduction.</p>	<p>The Applicant's view is that the scenarios are clearly defined within Chapter 5 Project Description (APP-042). Notably, Paragraph 5.20 states "There could be up to 30 'larger' or 35 'smaller' WTGs installed within the windfarm site to generate the nominal export capacity of 480MW." Further, the worst-case scenarios are outlined in regard to physical processes in Table 7.4 of Chapter 7 Marine Geology, Oceanography and Physical Processes (APP-044).</p>	<p>The MMO notes the Applicant's response. The Applicant's response does not address the previous comment as the Applicant does not propose to update the introduction.</p> <p>However, the MMO has no further comments as this is a minor matter and does not materially affect the application.</p>	<p>The Applicant welcomes this response. No further action required.</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
	RR-047-42	The MMO is content that all significant receptors have been included in regard to coastal processes.	The Applicant notes this response.	The MMO has no further comments.	The Applicant welcomes this response. No further action required.
D2-REP2035-94	RR-047-43	The MMO considers that there are no outstanding concerns in relation to this application in regard to coastal processes.	The Applicant notes this response.	The MMO has no further comments.	The Applicant welcomes this response. No further action required.
Chapter 8 Marine Sediment and Water Quality (APP-045)					
D2-REP2035-95	RR-047-44	The MMO notes the concentration of contaminants do not indicate any levels of concern and the suspended sediment plumes are expected to return to baseline conditions within 1 to 3 days and the magnitude of those impacts was assessed as negligible adverse effect on water quality. The MMO and Cefas agree with these comments. However, we defer to the Environment Agency to comment on water quality.	The Applicant notes this response.	The MMO has no further comment.	The Applicant welcomes this response. No further action required.
D2-REP2035-96	RR-047-45	In section 8.52 the ES states that in OSPAR region III (Celtic Seas) eutrophication is still a problem and reduction in phosphorus discharges exceed the OSPAR target of 50% compared to 1985 but nitrogen discharges were the main problem especially those from agriculture. Additionally, the concentrations of hazardous substances had generally fallen but were still above acceptable	The parameters mentioned tend to be found in estuarine and coastal sediments as they are associated with land-based activities. Flame retardants, for example, are discharged via point sources such as via sewage discharges (as reported by the Environment Agency polybrominated-	The MMO welcomes the Applicant's comment. The MMO considers the justification provided to be reasonable. The MMO has no further comment.	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>concentrations, and historic pollution in aquatic sediments acts as a continued source for releases of persistent chemicals. However, there is no indication of why pesticides (OCs) and other resistant chemicals like brominated flame retardants (PBDEs) were not included in the list of contaminants analysed for. You should provide justification as to why these contaminants were omitted from assessment for the characterisation and estimation of risk from release of dredged/disturbed sediment given the comments made in the ES regarding continuing OSPAR concern regarding persistent contaminants.</p>	<p>diphenylethers-pressure-rbmp-2021.pdf (environmentagency.gov.uk)) and landfills leaching. Therefore, they are much more likely to be found in coastal/estuarine sediments rather than in offshore environments. The site-specific data as reported in Sections 8.69 to 8.72 of Chapter 8 Marine Sediment and Water Quality (APP-045) confirms overall pollutant levels to be very low in the sediments therefore it is very unlikely that there would be elevated levels of other pollutants which are associated with land-based sources.</p> <p>Furthermore, consultation via the Evidence Planning Process (see Appendix A of the Consultation Report (APP-016) with representatives from both the MMO and Centre for Environment, Fisheries and Aquaculture Science (Cefas) did not raise any concerns with the parameters analysed and reported when</p>		

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			presented with the list of determinants and results.		
D2-REP2035-97	RR-047-46	The MMO and Cefas request that section 8.61 be clarified to include the types of chemical analyses performed on samples (e.g. metals, PAHs, PCBs etc.) and which if any together with the location of those samples that exceeded AL (action level) 2, as stating there were no significant exceedance of AL2 does not provide adequate explanation of the contamination present. The MMO and Cefas are not suggesting these analyses are undertaken but require reasons as to why they were not selected.	Section 8.61 of Chapter 8 Marine Sediment and Water Quality (APP-045) relates to sediment data collected for other projects: Walney Extension IV Offshore Wind Farm (Dong Energy, 2013) (approximately 18.8km from the Project) and West of Duddon Sands offshore windfarms (Dong Walney (UK) Limited, 2006) (approximately 12.9km from the Project). Given the age of the Environmental Impact Assessment (EIA)s, distance to the Morecambe array area and age of the data, the MMO are guided to the site-specific data presented in sections 8.69 to 8.72 which was collected within the Morecambe array area and much more recently, in 2022. This data did not show any exceedances of Cefas Action Level (AL) 1 for any of the parameters for which analysis was undertaken and is considered the best and most relevant evidence regarding levels of	The MMO notes this comment.	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			contamination present that could potentially be disturbed. This aligns with MMO comment ID RR-047-45.		
D2-REP2035-98	RR-047-47	The MMO and Cefas note that comparison of levels of arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc to Canadian quality standards should not be undertaken as the methods used to produce the results are not directly comparable in that the Canadian sediment quality guidelines use normalised metals analysis and likely a different digestion to that of the methods used for production of results of dredge material for determination of suitability for disposal for comparison to the UK Action Levels (e.g. aqua regia/nitric digest, no sieving, no normalisation).	Noted. The appropriate comparison against United Kingdom (UK) actions levels has been undertaken (MMO, 2015) (see Paragraph 8.25 of Chapter 8 Marine Sediment and Water Quality (APP-045).	The MMO has no further comment	The Applicant welcomes this response. No further action required.
Chapter 5 Project Description (APP-042)					
D2-REP2035-99	RR-047-48	You have suggested that for scour protection 'bagged solutions filled with grout or other materials. Protective aprons, mattresses with or without frond devices, and rock, concrete and gravel placement' (Chapter 5 section 5.53). Bags or mattresses may contain plastics. Concrete mattresses maybe linked polypropylene rope lattice, and	The Applicant acknowledges the MMO consideration of the risks associated with the introduction of plastic infrastructure. The selection of scour protection methods, where required, will be evaluated and further considered post-consent in the Offshore Construction	The MMO notes that recent research has indicated that there may be an increase in microplastic emissions from offshore wind farms (e.g., flaking of antifouling paint and erosion of turbine blade leading-edge protection	As per the response to ID WR-096-127 of The Applicant's Comments on Written Representations (REP2-027) submitted at Deadline 2, the Applicant is unclear how an assessment of microplastics could be undertaken as they will be dispersed as small particles, as with all other painted

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>artificial fronds mattresses made of continuous lines of overlapping buoyant fronds consisting of polypropylene or similar have been used in the marine environment over the years. Placing plastic infrastructure into the marine environment could pose a risk should they degrade.</p> <p>The MMO and Cefas request that the final design of these frond mattresses should be detailed in the offshore construction method statement that will be submitted to and approved by the MMO prior to commencement of development. This can then be secured within the Draft DCO submitted with the application for consent.</p>	<p>Method Statement, focusing on both engineering and suitability and environmental recoverability. The Offshore Construction Method Statement will be developed through consultation with the MMO and is secured in Condition 9(1)(d) of Schedule 6 of the Draft DCO (APP-012).</p>	<p>materials) which could subsequently impact upon benthic receptors ((Tagg <i>et al.</i>, 2024; Piarulli <i>et al.</i>, 2024).</p> <p>Advice provided to the nearby Morgan Offshore Windfarm project, from the MMO and Cefas, regarding this impact was to ensure adequate sampling of the pre-construction condition of sediment bound microplastic load. The MMO would similarly encourage the Applicant to seek opportunities for collaboration between researchers and industry to ensure that the opportunity to investigate this potential impact to benthic ecology is not missed at the Morecambe Offshore Windfarm.</p> <p>The MMO request that the impact of the Morecambe Offshore Windfarm on sediment bound microplastic load is scoped in for assessment and</p>	<p>structures in the marine environment. Furthermore, all paints used would be certified for use in the marine environment. There is no baseline to understand what a potential addition of potential microplastics from the Project means, given that these will be shed throughout the life of the Project and as fine particles, most will enter the water column and be distributed by currents across a wide area. The Applicant suggests that this is perhaps broadscale research but not EIA related. This type of research may not be suitable for the Project given the site is in proximity to oil and gas infrastructure and there could be no distinction between particles from the Project or nearby oil and gas infrastructure, noting the potential decommissioning activities associated with these structures.</p> <p>The Applicant has however provided an update to the IPMP that paint loss and leading edge protection erosion will be monitored during the asset protection studies conducted post-construction (In Principle</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				<p>advocate for the inclusion of a suitable pre-construction survey to enable future comparison, post construction.</p> <p>Additionally, the MMO notes that the Applicant states that the introduction of plastic infrastructure will be considered post-consent in the Offshore Construction Method Statement, focusing on engineering, suitability, and environmental recoverability. It does not appear to include consideration of the risk of the impact of the plastic infrastructure on the environment, only the recoverability of it. This should be expanded on.</p>	<p>Monitoring Plan_Rev 02_Clean (Document Reference 6.4)).</p> <p>With regard to the assessment and monitoring of paint flakes pre- and post-construction, the Applicant notes that the MMO have agreed with Morgan Offshore Wind Ltd that no further assessment of this impact needed to be undertaken (see RR-020.46 of REP2-029 in Morgan Offshore Wind Project's Examination Library). This has been reflected in a SoCG between Morgan Offshore Wind Ltd and the MMO at Deadline 3 (S_D3_MMO - Statement of Common Ground between Morgan Offshore Wind Limited and the Marine Management Organisation; REP3-028). This is in line with other similar developments (e.g. Dudgeon and Sheringham Shoal Extension Projects, East Anglia ONE North, East Anglia TWO) where applicants have not been required to undertake additional monitoring or research on plastic.</p> <p>The Applicant therefore maintains that the impact of the Project on sediment bound microplastic load should not be</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
					scoped in for assessment and that no further monitoring beyond that already outlined in the Offshore In-Principle Monitoring Plan (APP-148) is required.
D2-REP2035-100	RR-047-49	<p>In line with OSPAR guidance on the construction operation maintenance and decommissioning of offshore windfarms notification should be given to the regulator where there is potential for chemicals used and or discharged where there is a pathway to the marine environment, including those used within closed systems that require frequent top up should provide full details of the risk and justification for use of chemicals. This guidance includes the use of paints and coatings.</p> <p>In addition, some piles may require pre-drilling (with a maximum drill penetration of 56m) therefore the use of drilling fluids cements or cement additives etc., should be notified to the MMO for approval prior to use (section 5.103).</p>	<p>The Applicant acknowledges the MMO comments.</p> <p>An Offshore Project Environmental Management Plan (PEMP) will be finalised post-consent, to include details of a chemical risk assessment, that shall include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance.</p> <p>The PEMP is secured in Condition 9(1)(e) of Schedule 6 of the Draft Development Consent Order (APP-012).</p>	The MMO notes this comment and is currently reviewing the chemical notification condition to ensure it is fit for purpose.	The Applicant notes this response and will respond to any further comments provided by the MMO, if required.
D2-REP2035-101	RR-047-50	For gravity base options where necessary ballast used maybe water or heavy material such as rock or both. It does not say whether there will be any antifouling or biocide used within the gravity base either on	Should water be used as ballast, this would be locally sourced rather than imported, therefore the use of biocide is not considered necessary.	The MMO has no further comment.	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		installation or potentially required in the future. The MMO request that this be clarified within the ES (section 5.100).	The use of antifouling on solid ballast is again considered unnecessary. Implementation of biosecurity measures in line with international and national regulations and guidance will be listed within the PEMP, an Outline of which was submitted as part of the DCO Application (APP-146).		
D2-REP2035-102	RR-047-51	The use of suction buckets requires pumping grout into the bucket, care should be taken to minimise the use of concrete in the marine environment and prevent the release of grout/cement. Therefore, the construction method statements must include comment on what measures are to be taken to prevent the release of excess grout/cement to the wider environment.	<p>The Applicant acknowledges the MMO comments. An Offshore PEMP will be finalised post-consent, to include details of what measures are to be taken to prevent the release of excess grout/cement to the wider environment as required.</p> <p>The PEMP is secured in Condition 9(1)(e) of Schedule 6 of the Draft Development Consent Order (APP-012).</p> <p>The Offshore Construction Method Statement will be developed through consultation with the MMO and is secured in Condition</p>	<p>The MMO notes the Applicant will provide details of measures to prevent excess grout/cement to the wider environment post consent as part of the PEMP.</p> <p>The MMO will provide further comment if required.</p>	The Applicant notes this response and will respond to any further comments provided by the MMO, if required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			9(1)(d) of Schedule 6 of the Draft DCO (APP-012).		
D2-REP2035-103	RR-047-52	<p>The MMO and Cefas find it encouraging that outline procedures for the management of mud produced during drilling activities or any material from the seabed preparation are to be disposed of in accordance with the limits of the Deemed Marine Licence for licensed marine activities including disposal location quantities measures for waste concrete etc.</p> <p>Reporting procedures for these were included as part of the Project Environmental Management Plan. The MMO and Cefas note that drilling fluids together with all chemicals with a pathway to the marine environment should be included in plans for reporting.</p>	The Applicant acknowledges the MMO comments. The PEMP will include reporting requirements and is secured in Condition 9(1)(e) of Schedule 6 of the Draft DCO (APP-012).	<p>The MMO thanks the Applicant for their acknowledgement that the PEMP which will include reporting requirements and is secured as a condition on the draft development consent order.</p> <p>To reiterate the requirements for chemical use and discharge, the format and details required for all chemicals used with a pathway to the marine environment and not covered under other regulations (e.g. MARPOL (grey water, used on vessels) or in fully closed systems, should be included as part of the chemical risk assessment register.</p> <p>This should include information on the function, quantity of each chemical used and or discharged on each turbine/cable etc., as well as the frequency (e.g.</p>	The Applicant notes the additional detail provided and will provide comment if and when further comments are provided.

ID	Ref. from PD1- 011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				<p>twice a year, twice in ten years etc.) together with product information with consideration of their persistence, toxicity or bioaccumulation (PBT) potential prior to use. Depending on the PBT further information may be required, not limited to safety data sheets and where applicable (E.g. contains a know plastic) provide justification for their use, for approval by the MMO, supported by evidence no limited to safety sheets. This could include things like paints and coatings, greases, lubricants, rig wash, cement/grouting etc.</p> <p>If further clarification is required prior to drafting to ensure compliance the Applicant should contact the MMO. The MMO is reviewing the requirements and condition for chemical approvals and will provide an update in due course.</p>	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
D2-REP2035-104	RR-047-53	The MMO and Cefas note that if the sandwave clearance material is anticipated to be placed back within the array area you most likely would have to apply to the MMO to designate the area as a disposal site for the MMO to be able to fulfil its statutory obligations under OPSAR to be able to make accurate returns for dredge and disposal.	While surveys to date do not identify prevalence of sandwaves within the windfarm site, Chapter 7 Marine Geology, Oceanography and Physical Processes (APP-044), Chapter 8 Marine Sediment and Water Quality (APP-045) and Chapter 9 Benthic Ecology (APP-046) of the Environmental Statement (ES) assess the worst-case requirement for sandwave clearance/clearance of seabed sand features and disposal within the order limits. A Sediment Disposal Site Characterisation Report (APP-024) has been provided as part of the application in order for the area within the order limits to be designated as a disposal site through the DCO. The Applicant notes that the removal of and disposal of inert material is included as associated development for the purposes of the definition of the authorised project (Schedule 1, Part 1, Paragraph 1(c)) and for the purposes of the definition of	The MMO notes that on page 34 Table 4.1 of the characterisation report it shows that a total of 1,472,328m ³ of sediment is anticipated to be dredged/disturbed for the construction and maintenance of the windfarm, which is in line with ES Chapter 8 Table 8.2, anticipation of the worst case scenario from the works, therefore the MMO is content, from a dredge and disposal remit that the samples and analysis for the characterisation. The MMO is currently reviewing all information and working with our scientific advisors to designate disposal sites. Although disposal is an activity disposal sites are regulated and reported on under OSPAR and sites should be secured within the DML. Once this has been completed the MMO will inform the Applicant and request this is updated within the	The Applicant notes this comment and will respond to any further comments provided by the MMO.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			the licensed marine activities (Schedule 6, Part 1, Paragraph 3(c)). These definitions state that such activities are authorised 'within the Order limits'. Accordingly, no separate application for designation is considered required.	DML as part of the Examination process.	
Chapter 9 Benthic Ecology (APP-046)					
D2-REP2035-105	RR-047-54	The MMO has no concerns in regard to the receptors which have been scoped out. These are, namely, sediment bound contaminants and transboundary effects.	The Applicant notes this response.	The MMO has no further comments.	The Applicant welcomes this response. No further action required.
D2-REP2035-106	RR-047-55	The MMO considers that there are no outstanding concerns in relation to the Application in regard to benthic ecology.	The Applicant notes this response.	The MMO has no further comments	The Applicant welcomes this response. No further action required.
Chapter 10 Fish and Shellfish Ecology (APP-047)					
D2-REP2035-107	RR-047-56	The MMO is content that all relevant impacts to fish and fisheries have been identified and assessed.	The Applicant notes this response.	The MMO has no further comments.	The Applicant welcomes this response. No further action required.
D2-REP2035-108	RR-047-57	Figure 10.6 of Volume 5 Chapter 10 Fish and Shellfish Ecology Figures presents a 'heatmap' of herring larvae abundance date over the most recent 10 years of the NHLS (Northern Irish Herring Larvae Survey) (2012-2021) which has been	The MMO are correct in their summary of the methods used to create heatmaps of herring larvae abundance from Northern Irish Herring Larvae Survey (NIHLS) data. The qualitative heatmap is	The MMO welcomes this update. The MMO thanks the Applicant for their response and welcome the provision of the updated heatmap with accompanying legend in	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>overlaid with the mapped noise contours for the three modelled pile locations (east, north-west and south-west) based on the maximum hammer energy of 6,600 kJ, based on the 135 dB SELss threshold. Cefas fisheries advisors have had previous discussions with the Applicant's consultants regarding your approach to presenting data on the abundance and distribution of herring larvae at the Manx spawning ground. The MMO and Cefas understand that their approach has taken the NIHLs point data at each station and weighted these points according to the relative abundance of larvae across the grid, then smoothed the points to generated areas of higher and lower density/heat. Whilst it was agreed that this approach was suitable, it should be recognised that the 'high' / 'low' colour scheme shown in the legend in Figure 10.6 does not provide any value to contextualise what 'high' abundance or 'low' abundance means in terms of the number of herring larvae (e.g. no. per m²), so the heatmaps have limited value to the reader (unless they have been made aware of how the data have been treated). The MMO alongside Cefas recommend that the</p>	<p>intended to display how larval density distribution corresponds with existing spawning ground maps. An update to the figure legend has been made to display larval abundance quantitatively, giving further context to the heatmap colour scheme, and is being submitted at Procedural Deadline A (5.3.10 Chapter 10 Fish and Shellfish Ecology Figures_Rev 02) alongside this document.</p>	<p>Figure 10.6 of the Fish and Shellfish ecology figures. The legend provides the necessary context of the heatmap.</p>	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		legend is updated for transparency/clarity to all readers of the ES.			
D2-REP2035-109	RR-047-58	Cefas and the MMO do not support the conclusions made in the CIA (Cumulative Impact Assessment). The UWN modelling presented in Figures 10.8a and 10.8b present the piling noise impact range noise contours which overlap the spawning grounds of Atlantic cod. The modelling uses the hearing thresholds in Group 3 fish for piling of 207, 203 and 186 dB SELcum for mortality and potential mortal injury, recoverable injury and temporary threshold shift (TTS), respectively. Results of the underwater noise modelling presented in Table 10.25 (Chapter 10 Fish and Shellfish Ecology) quantify the area of impact to eggs and larvae during mono- and pin-piling, which is limited to an area of 0.32km ² for monopiling and 0.19km ² for pinpiling, though the impact range for this impact is not shown in Figures 10.8a and 10.8b. Figures 10.8a and 10.8b show that piling noise overlaps the spawning grounds of cod for all impairments, i.e. mortality and potential mortal injury, recoverable injury and especially for TTS.	The Applicant acknowledges the overlap of Group 3 noise effect thresholds from the Project and Atlantic cod spawning grounds displayed in Figures 10.8a and 10.8b. The Cumulative Effects Assessment (CEA) conclusions made in Section 10.7.3 of Chapter 10 Fish and Shellfish Ecology (APP-047) are drawn from the wide extent of cod spawning grounds across the Irish Sea and the temporary nature of piling effects in comparison to a four month spawning period. Effects on eggs and larvae are considered in Paragraphs 10.211 to 10.220 of Chapter 10 Fish and Shellfish Ecology (APP-047). In relation to the data sources mentioned by the MMO, the Applicant has considered these sources and is of the position that they are not sufficient to materially alter the understanding of cod	The MMO notes the Applicant's response. The MMO is working with the Applicant to address this point. At this stage, the MMO is requesting a seasonal restriction as the information provided to date does not provide confidence that there is no impact to fish. Additionally, the MMO notes, as standard even with an Underwater Sound Management Strategy a seasonal restriction would still have to be included on the face on the DML. However, the MMO is currently reviewing the DML and how a seasonal restriction would work alongside the Underwater Sound Management Strategy to provide the Applicant with condition wording and will provide an update in due course.	The Applicant maintains that there are no significant effects on cod spawning given the short duration of piling and the wide extent of cod spawning grounds across the Irish Sea. However, the Applicant has submitted an Outline UWSMS for Deadline 2 (REP2-026), which will be developed in consultation with the MMO and other stakeholders, would be finalised and approved before piling commences. The UWSMS explores the potential for further reductions in the magnitude of impacts from elevated underwater sound from the Project and consequently reduces the contribution to potential cumulative impacts. Options to be considered, developed and discussed in the development of the UWSMS include further design refinement, temporal phasing of piling activity, and noise

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>Whilst suitable UWN modelling has been undertaken in respect of cod, it is disappointing to see that the assessment of impacts from UWN has assessed cod under the generic Group 3 fish in Section 10.245. The assessment seems to be missing the link between the cod as a Group 3 fish and the spawning activity they engage in at their spawning grounds. Meanwhile, the assessment of impacts from noise on spawning grounds in Sections 10.211 – 10.220, only considers impacts to the eggs and larvae, rather than the spawning fish. In our advice for PEIR we highlighted that piling works could have potential to significantly impact cod at a population level if piling was to occur during their spawning season (January – April inclusive). This is of particular importance, given ICES' latest advice on cod for the Irish Sea which states that when the maximum sustainable yield (MSY) approach and precautionary considerations are applied, there should be zero catch in 2023' and that 'Fishing pressure on the stock is below FMSY, and spawning-stock size is below MSY Btrigger, Bpa, and Blim' (ICES 2022). We also pointed to Fox <i>et al.</i> (2000) which reports high site fidelity in cod spawning</p>	<p>spawning in relation to the Project, and subsequently would not materially affect the assessment of significance (or the MMO's position that they do not support the conclusions of the CEA in relation to cod spawning).</p> <p>The Applicant intends to follow the developments in the approach to piling of other nearby projects (in terms of timings, techniques, and mitigations), and will further develop the piling strategy, including any mitigations, in agreement with the MMO post-consent. The Applicant will seek to discuss further with the MMO (and Natural England (NE) given their comment regarding this in their RR) the structure of an Underwater Sound Management Strategy as a mechanism of agreeing mitigation post-consent, which will also consider measures the Project may need to take in light of potential cumulative effects</p>	<p>Regarding the impacts of UWN from piling and UXO, the Applicant has now acknowledged the overlap in the noise effects of mortality and potential mortal injury, recoverable injury and temporary threshold shift (TTS) in cod at their spawning ground. However, the Applicant goes on to state that their cumulative effects assessment conclusion (of minor adverse impacts) for UWN from piling was made based on the wide extent of the cod spawning ground across the Irish Sea and the temporary nature of piling effects, in comparison to the four-month spawning period of cod. This conclusion ignores the issue of three other offshore wind farm (OWF) developments (Morgan OWF DCO/2022/00003, Mona OWF DCO/2022/00004 and Awel Y Môr OWF</p>	<p>mitigation techniques, such as NAS.</p> <p>The Applicant notes that the length of piling for the Project is relevant for Project alone effects. The Applicant understands that the MMO takes the position that piling for the Project, whether considered Project-alone or cumulatively, has the potential to significantly affect spawning cod in the Irish sea if activity occurs over the period January – April inclusive, and therefore that a restriction in piling over this period, based on the current Project-specific noise modelling, will be recommended by the MMO regardless of whether piling of other Projects occurs simultaneously (i.e. the MMO's recommended seasonal restriction would stand for piling from the Project-alone). The Applicant also understands that this is consistent with advice provided by the MMO to other Offshore Windfarm (OWF) project DCO applications in the Irish Sea, such as Mona and Morgan, however noting that there are also discussions on</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>grounds in the Irish Sea. For these reasons, the MMO and Cefas would have expected you to consider this information, and potentially other sources of data to inform their assessment such as data from the Northern Irish ground fish trawl survey which has been ongoing since 2009 and has several survey stations within the eastern Irish sea (data are available from ICES: http://datras.ices.dk/). In the absence of any data to suggest that this part of the cod spawning ground is of lower importance than other areas, and in consideration of ICES advice on the cod population in the Irish sea, the MMO and Cefas recommend that piling is not permitted during the cod spawning season and recommend that the following restriction is conditioned on the deemed marine licence:</p> <p>No piling of any kind shall take place during the cod spawning period from 1st January to 30th April (inclusive) of any year. Reason: To prevent disturbance to adult spawning cod during their spawning season.</p>	<p>and in line with other projects on similar timescales.</p> <p>The Applicant will provide an Outline Underwater Sound Management Strategy at Deadline 2 in order to take into account potential further comments from the MMO expected at Deadline 1. The Applicant has added a new condition 30 (Underwater Sound Management Strategy) in the DML submitted with the updated draft DCO at Procedural Deadline A to secure this. Additionally, the Outline Underwater Sound Management Strategy has been added as document to be certified in the draft DCO.</p>	<p>Order 2023 No. 1033) that may be piling at the same time as Morecambe OWF (see Annex 1 Table 2). The MMO has reviewed the provisional UWN modelling for the Morgan and Mona projects, both of which showed extensive overlaps in noise effects with the cod spawning grounds. The MMO has not reviewed the UWN modelling for piling at Awel Y Môr OWF as the project is located outside English waters, so the MMO is unable to comment on the range of effect from piling at this development. However, based on the location of Awel Y Môr, to the south of Mona OWF, the MMO does not think it unreasonable to assume some overlap of noise effects with the cod spawning ground from piling at this project. With the potential for more than one of these</p>	<p>the peak spawning period, which it considers to be February to March, rather than the full spawning season.</p> <p>The Applicant notes that the measures contained within the UWSMS would be approved by the MMO post-consent, and pre-piling, given that the UWSMS is condition of the DML. This provides a mechanism for the precise mitigation appropriate for the detailed design to be approved before piling can begin, with potential measures ranging from further design refinement, noise mitigation techniques and temporal phasing of piling activities. The imposition of an additional DML condition to secure a piling restriction would be unnecessary, noting any mitigation would need to be considered against the proportionality of any benefits and a seasonal piling restriction would be securable through the UWSMS if required.</p> <p>The Applicant notes that the Project can only mitigate its</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				<p>projects to be piling at the same time, the spatial extent of noise disturbance is expected to increase, and thus the area of unaffected cod spawning grounds available is expected to decrease. Hence, the MMO considers, the Applicant has not given appropriate consideration to the effects of UWN from piling at multiple OWF sites and the MMO does not support their conclusion that cumulative impacts from piling noise will be minor adverse.</p> <p>Additionally, the Applicant considers that the supporting literature sources cited by the MMO are 'not sufficient o materially alter the understanding of cod spawning in relation to the Project, and subsequently would not materially alter the understanding of cod spawning significance'. Please note that the</p>	<p>contribution to cumulative effects and not the impacts of other OWF Projects. The Applicant notes that the MMO has identified the Walney Extension OWF (DCO/2013/00008) as having a seasonal restriction in the past but would be interested to understand whether such restrictions were secured for AyM, which as the MMO identifies is one of the projects considered in the CEA.</p> <p>See also D2-REP2035-44 above in relation to NAS.</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				<p>reference to advice by the International Council for the Exploration of the Seas (ICES, 2022) was made to highlight the critical state of Irish Sea cod spawning stock and thus their vulnerability to further population decline due to disturbance during their spawning season which may lead to a reduction in the success of spawning and reproduction. The reference to high site fidelity in cod spawning grounds in the Irish Sea by Fox <i>et al.</i> (2000) was made to highlight that the assumption that the cod can move to other parts of the wider spawning ground may not be the case, and thus it is unwise to draw assessment conclusions on this basis.</p> <p>Also, the Applicant has stated their intension to follow the developments in the approach to piling of other nearby projects (in terms of timings,</p>	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				<p>techniques, and mitigations) and will develop their piling strategy, and any mitigations, in agreement with the MMO post-consent. The Applicant may wish to know that the MMO has been consistent in our recommendation for a marine licence condition on piling during the cod spawning season for Morecambe, Mona and Morgan OWFs, and that this restriction has also been applied to other Irish sea</p> <p>OWF sites in the past, e.g. Walney Extension OWF (DCO/2013/00008).</p> <p>The requirement for mitigation forms part of the consenting process, and the MMO does not support the Applicant's proposal for the requirement for mitigation to be assessed post-consent. We maintain that the following condition must be included in the DML to</p>	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				<p>prevent disturbance to adult spawning cod during their spawning season:</p> <p>"In the event that driven or part driven pile foundations are to be used no piling may be undertaken between 01 January to 30 April inclusive, unless otherwise agreed to in writing by the MMO and in consultation with the statutory nature conservation body."</p> <p>As mentioned above the MMO is currently reviewing the wording of this condition alongside the inclusion of the UWSMS.</p>	
D2-REP2035-110	RR-047-59	As per our advice on the PEIR, you may wish to consider the use of noise abatement measures such as big as big bubble curtains (BBC) or double BBC during piling, to reduce the noise levels emitted during piling (see Würsig <i>et al.</i> (1999)). UWN modelling incorporating the use of noise abatement measures has been shown to reduce the range of effect	<p>The Applicant is planning appropriately for the potential requirement for NAS but maintains the position that the effects may be suitably mitigated through further design refinement and other embedded mitigation.</p> <p>The Applicant will seek to discuss further with the MMO (and NE given their comment</p>	Regarding the use of noise abatement systems (NAS), the Applicant states that they are 'planning appropriately for the potential requirement for NAS but maintains the position that the effects may be suitably mitigated through further design refinement and other embedded	The Applicant has submitted an UWSMS at Deadline 2 (REP2-026), which will be developed in consultation with the MMO and other stakeholders, to be finalised and agreed before piling commences. The UWSMS secures the potential for further reductions in the magnitude of impacts from elevated underwater sound from the

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		for disturbance with sensitive habitats such as spawning grounds.	<p>regarding this in their RR) the structure of an Underwater Sound Management Strategy as a mechanism of agreeing mitigation post-consent, which will also consider measures the Project may need to take in light of potential cumulative effects and in line with other projects on similar timescales.</p> <p>The Applicant will provide an Outline Underwater Sound Management Strategy at Deadline 2 in order to take into account potential further comments from the MMO expected at Deadline 1. The Applicant has added a new condition 30 (Underwater Sound Management Strategy) in the DML submitted with the updated draft DCO at Procedural Deadline A to secure this. Additionally, the Outline Underwater Sound Management Strategy has been added as document to be certified as one referred to in the DCO.</p>	<p>mitigation'. In light of the above comments (RR-047-58), at this stage, the Applicant has not provided any suitable evidence of specific mitigation or noise management measures that will reduce the range of impact from piling noise on cod. Given the extensive overlap in the range of effect for all effects (mortality and potential mortal injury, recoverable injury and temporary threshold shift (TTS)) for cod, the MMO believes it is highly unlikely that the Applicant will be able to reduce the range of impact from piling to an acceptable level through design refinement and embedded mitigation measures alone. Hence the MMO requests of a seasonal piling restriction during the cod spawning season (January – April inclusive) must remain as a condition on the DCO until sufficient evidence</p>	<p>Project and consequently reduces the contribution to potential cumulative impacts. Options to be considered, developed and discussed in the development of the UWSMS, include further design refinement, temporal phasing of piling activity, and noise mitigation techniques.</p> <p>The Applicant considers that a requirement for the MMO to approve the measures contained within the UWSMS post-consent, and pre-piling, as a condition of the DML, provides a mechanism for an agreement to be reached with the MMO before piling can begin, thus securing potential measures ranging from further design refinement, noise mitigation techniques, temporal phasing of piling activities. A seasonal piling restriction would be securable through the UWSMS if deemed necessary following detailed Project design. See also D2-REP2035-44 above in relation to NAS</p>

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				<p>of noise reduction strategies has been provided by the Applicant.</p> <p>If the Applicant is giving any serious consideration to the use of NAS, such as double big bubble curtains (DBBC) then they should be presenting UWN modelling as evidence that an acceptable reduction in the range of effect from piling noise can be achieved when using NAS/DBBC. The MMO would expect this evidence to be presented as part of their Environmental Impact Assessment process, i.e., pre-consent, rather than post-consent.</p> <p>The MMO also highlights that as no underwater sound management strategy (UWSMS) has been provided, the MMO cannot support the Applicant's proposal that the UWSMS be used as a 'mechanism of</p>	

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
				<p>agreeing measures post-consent'.</p> <p>The Applicant must provide suitable evidence that mitigation is not required before the DCO is granted. If they cannot do this, then they must accept that mitigation, in the form of seasonal restriction, is required until such time post-consent that they are in a position to provide suitable evidence that the mitigation is not required – hence they would require a post-consent variation to the dML</p>	
D2-REP2035-111	RR-047-60	Cefas and the MMO do not support the conclusions made in the CIA that that the cumulative effects of piling noise are deemed to be no greater than project-alone effects 'minor adverse'. We would also add that recent advice for Morgan OWF (DCO/2022/00003) which is located entirely in the Irish sea cod spawning ground we highlighted the likelihood that a seasonal piling restriction to protect spawning adult cod and their eggs and larvae will be necessary during the spawning season (January – April inclusive). Whilst we have	The Applicant acknowledges the overlap of Group 3 noise effect thresholds from the Project and Atlantic cod spawning grounds displayed in Figures 10.8a and 10.8b in Chapter 10 Fish and Shellfish Ecology Figures (APP-094). The CEA conclusions made in Section 10.7.3 in Chapter 10 Fish and Shellfish Ecology (APP-047) are drawn from the wide extent of cod spawning grounds across the Irish Sea	Please see comments raised under RR-047-58 and RR-0-47-59.	Please refer to ID D2-REP2035-111 above.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		<p>raised a number of points requiring further clarification on their UWN modelling, the modelling that was presented suggests that an extensive overlap of noise disturbance will occur at the spawning ground.</p>	<p>and the temporary nature of piling effects in comparison to a four-month spawning period.</p> <p>The Applicant intends to follow the developments in the approach to piling of other nearby projects (in terms of timings, techniques, and mitigations), and will further develop the piling strategy, including any mitigations, in agreement with the MMO post-consent.</p> <p>The Applicant will seek to discuss further with the MMO (and NE given their comment regarding this in their RR) the structure of an Underwater Sound Management Strategy as a mechanism of agreeing mitigation post-consent, which will also consider measures the Project may need to take in light of potential cumulative effects and in line with other projects on similar timescales.</p> <p>The Applicant will provide an Outline Underwater Sound Management Strategy at Deadline 2 in order to take into account potential further</p>		

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			comments from the MMO expected at Deadline 1. The Applicant has added a new condition 30 (Underwater Sound Management Strategy) in the DML submitted with the updated draft DCO (3.1 Draft Development Consent Order_Rev 02) at Procedural Deadline A to secure this. Additionally, the outline Underwater Sound Management Strategy has been added as document to be certified as one referred to in the DCO.		
D2-REP2035-112	RR-047-61	The MMO has no comments to make in relation to receptors which have been scoped out and not considered within the ES with regards to shellfish ecology.	The Applicant notes this response.	The MMO has no further comments.	The Applicant welcomes this response. No further action required.
D2-REP2035-113	RR-047-62	The MMO considers that there are no outstanding concerns in relation to the Application in regard to shellfish.	The Applicant notes this response.	The MMO has no further comments to make.	The Applicant welcomes this response. No further action required.
Chapter 13 Commercial Fisheries (APP-050)					
D2-REP2035-114	RR-047-63	The MMO defers to the National Federation of Fishermen's Organisations along with standalone representatives on matters of commercial fisheries. The MMO will continue to be part of the discussions relating to securing any mitigation,	The Applicant notes this response.	The MMO has provided further comments in section 1 of this letter.	The Applicant has responded to the commercial fisheries related comments from the MMO above in Table 2.2 (ID D2-REP2035-07 and D2-REP2035-08).

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		monitoring or other conditions required within the DML.			
Chapter 11 Marine Mammals (APP-048)					
D2-REP2035-115	RR-047-64	All relevant/applicable marine mammal functional hearing groups have been considered in the underwater noise modelling assessment. The marine mammal species scoped into the ES assessment, which sit within these four hearing groups are, Harbour porpoise, Bottlenose dolphin, Common dolphin, Risso's dolphin, White-beaked dolphin, Minke whale, Grey seal and Harbour seal. The MMO and Cefas consider all relevant impacts in regard to underwater noise have been scoped in for assessment.	The Applicant notes this response.	The MMO has no further comments to make.	The Applicant welcomes this response. No further action required.
D2-REP2035-116	RR-047-65	With regard to Section 4.2.3 – SW location – installation of single monopile, the MMO and Cefas note that the received SELss versus range (transect curve in Figure 3-5), which are now explicitly included and thus are proving (together with the levels 750 m in Section 4-1) an additional point of reference for the sense checking process, are showing relatively high noise levels, which are well within the values we would expect for sandy seabed environments (i.e., with good	Following the impact piling modelling presented in the main report Appendix 11.1 Underwater Noise Assessment (APP-065), further investigation into scenarios using higher strike rates were identified for the monopile and pin pile scenarios. A piling hammer is capable of more rapid strikes at lower blow energies.	The MMO has no further comment.	The Applicant welcomes this response. No further action required.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		propagation conditions). In this scenario, however, the MMO and Cefas would expect overall larger injury effect ranges for marine mammals (e.g., the maximum PTS (permanent threshold shift) ranges for the LF (low frequency) and VHF (very-high frequency) receptors could be 2-3 times larger). We note that these larger impact ranges seem to align well with the predictions presented in the draft MMMP document (Table 3.1 from the draft MMMP), where, for example, the maximum PTS ranges are 13 km for minke whale and 8.1 km for harbour porpoise, while corresponding ranges from the current Appendix 11.1 are 5.0 km and 3.3 km, respectively. The predicted impact ranges presented in the draft MMMP differ to those ranges presented in Appendix 11.1.	To show the differences between the maximum strike rate scenario and the results presented in Section 4 of Appendix 11.1 Underwater Noise Assessment (APP-065), additional modelling was completed for the SW location. Table 3.1 in the draft MMMP (APP-049) lists the worst-case impact ranges for the project based on the Maximum strike rate scenario listed in Appendix B of Appendix 11.1 Underwater Noise Assessment (APP065) and would be the worst-case impact range to be mitigated and therefore currently used in the assessments.		
D2-REP2035-117	RR-047-66	The MMO and Cefas note a minor discrepancy in the project description. Table 5.5 in Chapter 5 Project description states that the maximum pile diameter (m) for multi-legged pin piled jacket WTF/OSP foundations is 3 m, whereas the underwater noise modelling in Appendix 11.1 considers a worst-case scenario of installing 5m diameter pin piles.	The Applicant considers the worst-case scenario presented in the underwater noise modelling assessment is appropriate. It is noted that the worst-case for underwater noise modelling considers the largest hammer energy, and the highest strike rate, and includes either three sequential monopiles or four	The MMO notes the Applicant's comment. The MMO acknowledges that the underwater noise modelling assumes a larger pile diameter. The MMO have recommended to the Applicant that this information across the various Environmental Statement and	The Applicant confirms that the worst case scenario will be made clear across all marine mammal documents, which are anticipated to be updated and submitted at Deadline 4.

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
			<p>sequential pin piles in a 24hr period.</p> <p>The underwater noise assessment report (Appendix 11.1 Underwater Noise Assessment (APP-065)) presented modelling for larger pile sizes (14m for monopile and 5m for pin piles) as the modelling was undertaken prior to a Project refinement whereby pile diameters were reduced to 12m for monopile and 3m for pin-piles. The modelling is therefore precautionary and encompasses the worst-case scenario.</p> <p>The Applicant commits to updated underwater noise modelling post-consent to inform the final MMMP once the selection of foundations have been made. This will inform the appropriate mitigation post consent alongside final design details.</p>	<p>appendixes are consistent, so it is clear what the worst-case assumptions are but welcomes this clarification.</p>	
Chapter 14 Shipping and Navigation (APP-051)					
D2-REP2035-118	RR-047-67	MMO defers to the Maritime and Coastguard Agency and Trinity House on matters of shipping and navigation and supports any	The Applicant notes this response.	Please see comments in Section 1.4 of the MMO's response to Deadline 1.	The Applicant notes that MMO defers to MCA and TH on shipping & navigation matters and will respond to any further

ID	Ref. from PD1-011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		comments raised. The MMO will continue to be part of the discussions relating to the securing any mitigation, monitoring or other conditions required within the DML.			comments provided by the MMO.
Chapter 15 Marine Archaeology and Cultural Heritage (APP-052)					
D2-REP2035-119	RR-047-68	The MMO defers to Historic England (HE) on matters of marine archaeology and supports any comments raised. The MMO will continue to be part of the discussions relating to securing any mitigation, monitoring or other conditions required within the DMLs.	The Applicant notes this response.	Please see comments in Section 1.3 of the MMO's response to Deadline 1.	The Applicant notes that MMO defer to HE on matters of marine archaeology and will respond to any further comments provided by the MMO.
Chapter 18 Seascape, Landscape and Visual Impact Assessment (APP-055)					
D2-REP2035-120	RR-047-69	The MMO defers to NE as the SNCB (Statutory Nature Conservation Body), along with HE and the Local Planning Authorities on matters of Seascape, Landscape and Visual Impacts and supports any comments raised. The MMO will continue to be part of the discussions relating to securing any mitigation and monitoring or other conditions required within the DML.	The Applicant notes this response.	The MMO understands there is no outstanding comments on this matter.	The Applicant welcomes this response. No further action required.
Chapter 12 Offshore Ornithology (APP-049)					
D2-REP2035-121	RR-047-70	The MMO defers to NE as SNCB, and supports any comments raised in relation to the Ornithology. The MMO will continue to be part of the discussions relating to securing any	The Applicant notes this response.	Please see comments in Section 1.6 of the MMO's response to Deadline 1, which in general defers to the SNCBs.	The Applicant notes this response.

ID	Ref. from PD1- 011	Relevant Representation Comment	Applicant Response at Procedural Deadline A	MMO's Deadline 1 response and MMO's Deadline 2 response	Applicant response at Deadline 3
		mitigation and monitoring or other conditions required within the DML.			

2.3 Natural England (REP2-037)

Table 2.4 The Applicant's comments on Natural England's Deadline 2 submission (REP2-037)

ID	Comment	Applicant's Response
D2-REP2037-01	<p>Dear Robert Jackson,</p> <p>Morecambe Offshore Windfarm Generation Assets</p> <p>The following constitutes Natural England's formal statutory response for Examination Deadline 2.</p>	The Applicant notes this response.
D2-REP2037-02	<p>1. Natural England's Deadline 2 Submissions</p> <p>Natural England has reviewed the documents submitted by the Applicant at Deadline 1. We are submitting the following detailed responses:</p> <ul style="list-style-type: none"> Morecambe Generation NE Risk and Issues Log Deadline 2 Appendix B4 Natural England's comments on (REP1-080) 9.22 Offshore Ornithology Technical Note 1_EIA Appendix B5 Natural England's Comments on (REP1-081) 9.22 Offshore Ornithology Technical Note 2_HRA Appendix B6 Natural England's Comments on (REP1-082) 9.24 Offshore Ornithology Technical Note 3_RTD at Liverpool Bay SPA Update Assessment Appendix B7 Natural England's Comments on (REP1-093) 9.30 Update on Without Prejudice Compensatory Measures <p>Appendix G Natural England's Comments on the In Principle Monitoring Plan - Deadline 2</p>	The Applicant notes this response.
D2-REP2037-03	<p>2. Use of technical notes and update documents</p> <p>The Applicant has submitted new technical notes and other updates at Deadline 1 covering some of the issues Natural England has raised concerning marine mammals and offshore ornithology. Natural England notes that much of the additional information presented in the technical notes is not yet included in updated ES chapters, assessments or named plans. Whilst Natural England has referred to these technical notes in preparing this submission, we do not consider these issues to be addressed until updates</p>	The Applicant is aware of Natural England's position and has submitted an updated Draft Marine Mammal Mitigation Protocol_Rev 02 (REP2-018) at Deadline 2 and is anticipating to provide an updated Chapter 11 Marine Mammals and Chapter 12 Offshore Ornithology at Deadline 4, incorporating the additional presented in the technical notes.

ID	Comment	Applicant's Response
	are made to the relevant ES chapters, assessments or named plans as appropriate, and the RAG ratings in the Risk and Issues Log are reflective of this.	
D2-REP2037-04	Natural England welcomes the clear referencing of which issues are covered by each section within the technical notes. This provides an indication of which issues are in progress: brief notes in the Risk and Issues Log are provided to note this.	The Applicant welcomes this response.
D2-REP2037-05	Updated versions of some ES chapters, assessments and plans have been provided. However, there is no indication of what the content of these updates is. This presents significant uncertainty as to what has been updated and whether changes are minor (as is the case for most of the updated documents submitted at Deadline 1) or relate to meaningful progress on Natural England's key issues. Natural England urges the Applicant to provide clear signposting of what has been changed in all updated documents submitted.	The Applicant acknowledges this comment and has now submitted an Annex to the Guide to the Application (Guide to the Application_Rev 06 (Document Reference 1.3)) which details the updates made to each document throughout Examination.
D2-REP2037-06	3. Availability of supporting references The new document REP1-093 "9.30 Update on Without Prejudice Compensation Measures - Revision 01 (Volume 9)" contains reference to an RSPB feasibility study for the Banks Marsh option. Whilst much of this is summarised in the update, the study itself is not publicly available nor is it included as a supporting Annex. In this instance, Natural England's involvement with the project means we have been able to see the full study; nonetheless, important references that are not publicly accessible should be included in submissions if possible.	The Applicant notes this response. The Royal Society for the Protection of Birds (RSPB) feasibility study referenced remains in draft form, which was the reason for not including the report into examination or as an Annex to the Update on Without Prejudice Compensation Measures. The Applicant checked with the report authors prior to submission of the Update to ensure agreed referencing was included where appropriate and that the relevant information had been correctly summarised. Discussions are on-going to produce a final version of the feasibility study, however it is not yet known if the report will be finalised within the timeframe of the Morecambe Generation DCO application.
D2-REP2037-07	For any queries relating to the content of this letter please contact me using the details provided below. Yours sincerely, (REDACTED)	The Applicant notes this response.

ID	Comment	Applicant's Response
Appendix B4 to Natural England's Deadline 2 Submission		
Natural England's comments on (REP1-080) 9.22 Offshore Ornithology Technical Note 1_EIA		
D2-REP2037-08	1. Major/Complex comments In formulating these comments, the following documents have been considered: REP1-080 9.22 Offshore Ornithology Technical Note 1_EIA	The Applicant notes this response.
D2-REP2037-09	<i>1.1 Summary</i> This note addresses the technical points raised by Natural England in our relevant reps regarding EIA methodology, and provides an analysis of the effectiveness of increasing the air gap of the turbines as a mitigation measure to reduce collision risk to great black-backed gull. We are satisfied that the correct mortality rates and reference populations are now being used for the assessment and that the use of these has not materially changed the outcome of the project-alone assessment. These changes should be incorporated into the ES chapter.	The Applicant welcomes this response and is anticipating to provide an updated Chapter 12 Offshore Ornithology, expected to be at Deadline 4.
D2-REP2037-10	We note that the Applicant has addressed our comment regarding the adequacy of the "gap-filling" methodology for the cumulative effects assessment and that impact values are now provided for all available projects. We have not yet been able to review the methodology and figures in depth and will provide detailed comments regarding this at Deadline 3.	The Applicant welcomes this response and will provide a response to any further comments received from Natural England (NE), if required.
D2-REP2037-11	Table 1: Natural England's Advice On: 9.22 Offshore Ornithology Technical Note 1_EIA NE Ref 1, Section 2.1.1. <u>Key Concern and/or Update:</u> Natural England highlight that there were some minor differences in recommended parameters between the draft guidance supplied to the Applicant and the final published joint SNCB guidance note. <u>Natural England's Advice to Resolve Issues:</u> Natural England recognise that we provided clear advice on the parameters to use for collision risk modelling during the consultation process and consider that it would not be reasonable to expect the Applicant to re-run the	The Applicant welcomes this response.

ID	Comment	Applicant's Response
	collision risk modelling at this point on the basis of the minor differences between the draft version that was shared with the Applicant and the final published version. We therefore consider that the collision risk modelling figures presented are appropriate.	
D2-REP2037-12	<p>Section 2</p> <p><u>Key Concern and/or Update</u></p> <p>We welcome that the Applicant has provided updated assessments of impacts using Natural England's advised baseline mortality rates along with the explanation provided of how these rates affect the conclusions presented in the ES. Natural England are in agreement that, for project alone impacts, the use of the corrected rates does not affect the conclusion of the assessment.</p> <p><u>Natural England's Advice to Resolve Issues:</u></p> <p>We also welcome that the Applicant has incorporated the updated mortality rates into the CEA, which Natural England will provide detailed comments on at Deadline 3.</p> <p>The corrected mortality rates and consequent calculations should be incorporated into a revised version of the ES. Natural England will then consider this issue resolved.</p>	The Applicant welcomes this response and will provide an updated Chapter 12 Offshore Ornithology, expected to be at Deadline 4. The Applicant will provide a response to any further comments received from NE in respect of the Cumulative Effects Assessment (CEA), if required.
D2-REP2037-13	<p>NE Ref 2 Section 3</p> <p><u>Key Concern and/or Update</u></p> <p>Natural England previously advised (B8) that the Applicant had not fully followed our advised approach to "gap-fill" the cumulative effects assessment (CEA) and that the submitted CEA still contained multiple instances of impacts from historical projects being unquantified. We welcome that the Applicant has now addressed this by producing an updated CEA for key species (guillemot, Manx shearwater, herring gull, lesser black-backed gull, great black-backed gull and little gull) in which all historical projects have annual estimated abundance/mortality figures provided. This will allow Natural England to reach conclusions regarding cumulative impacts with much more confidence. However, at this stage, we have not had time to review the figures and methodology used.</p> <p><u>Natural England's Advice to Resolve Issues:</u></p>	The Applicant welcomes this response and will provide a response to any further comments received from NE, if required.

ID	Comment	Applicant's Response
	Natural England will provide detailed comments regarding the updated CEA at Deadline 3.	
D2-REP2037-14	<p>Section 4</p> <p><u>Key Concern and/or Update</u></p> <p>We welcome the analysis the Applicant has undertaken to investigate the effect of increasing turbine hub height on great black-backed gull impacts. The analysis demonstrates that for project alone impacts, increasing the air gap from 25 to 30m leads to a 25% decrease in estimated collisions. However, we accept that given the low numbers of collisions predicted, the overall benefit from increasing the air gap is minor, particularly when considered in the context of cumulative impacts.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>We accept that the Applicant has sufficiently demonstrated that this mitigation measure is unlikely to affect the outcome of the assessment, nor lead to a material improvement in terms of the Project's impact on the great black-backed gull population.</p>	The Applicant welcomes this response. As evidenced by the Applicant in the Offshore Ornithology Technical Note 1 (Environmental Impact Assessment (EIA)) (REP1-080) submitted at Deadline 1, increasing the air gap above 25m would make a very small difference to the predicted mortality, particularly when considered for the cumulative effect. Therefore, as there would be no measurable mitigation benefit, the Applicant confirms that no further increase in air gap is proposed.
Appendix B5 to Natural England's Deadline 2 Submission Natural England's comments on (REP1-081) 9.22 Offshore Ornithology Technical Note 2_HRA		
D2-REP2037-15	<p>Major/Complex comments</p> <p>In formulating these comments, the following documents have been considered:</p> <p>REP1-081 9.22 Offshore Ornithology Technical Note 2_HRA</p>	The Applicant notes this response.
D2-REP2037-16	<p><i>1.1 Summary</i></p> <p>This note addresses the technical points raised by Natural England in our relevant reps regarding methodology for HRA, and provides an analysis of the effectiveness of increasing the air gap of the turbines as a mitigation measure to reduce collision risk to lesser black-backed gull. We are satisfied that appropriate apportioning values are now being used for the assessment and that the use of these has not materially changed the outcome of the project-alone assessment. These changes should be incorporated into the RIAA.</p>	The Applicant welcomes this response and will provide an updated Report to Inform Appropriate Assessment, expected to be at Deadline 4.

ID	Comment	Applicant's Response
	<p>We note that the Applicant has addressed our comment regarding the adequacy of the "gap-filling" methodology for the in-combination assessment and that impact values are now provided for all available projects. We have not yet been able to review the methodology and figures in depth and will provide detailed comments regarding this at Deadline 3.</p>	<p>The Applicant welcomes this response and will provide a response to any comments received from NE if required.</p>
D2-REP2037-17	<p>NE Ref 1, Section 2.1, 2.2 <u>Key Concern and/or Update</u> We welcome the Applicant's use of updated figures for apportioning lesser black-backed gull (LBBG) impacts to Morecambe Bay and Duddon Estuary SPA and Ribble and Alt Estuary SPA, and the use of the most recent colony counts as reference populations. <u>Natural England's Advice to Resolve Issues</u> We are satisfied with the project-alone assessments presented for LBBG at Morecambe Bay and Duddon Estuary SPA and Ribble and Alt Estuary SPA. We accept that there will be no project-alone adverse effect on either of these sites. Once this assessment is incorporated into a revised RIAA, we are satisfied that this issue will be resolved.</p>	<p>The Applicant welcomes this response and will provide an updated Report to Inform Appropriate Assessment, expected to be at Deadline 4.</p>
D2-REP2037-18	<p>NE Ref 2, Section 3.1 <u>Key Concern and/or Update</u> We welcome that the Applicant has produced an updated in-combination assessment of impacts on the lesser black-backed gull feature of Morecambe Bay and Duddon Estuary SPA and Ribble and Alt Estuary SPA in which all historical projects have annual estimated abundance/mortality figures provided. This will allow Natural England to reach conclusions regarding in-combination impacts with much more confidence. However, at this stage, we have not had time to review the figures and methodology used. <u>Natural England's Advice to Resolve Issues</u> We will provide detailed comments regarding the updated in-combination assessment at Deadline 3.</p>	<p>The Applicant welcomes this response and will provide a response to any comments received from NE if required.</p>
D2-REP2037-19	<p>NE Ref 3, Section 3.2 <u>Key Concern and/or Update</u></p>	<p>The Applicant welcomes that NE is content with the updated Collision Risk Modelling (CRM) analysis methodology.</p>

ID	Comment	Applicant's Response
	We thank the Applicant for providing us with collision risk modelling (CRM) input and log files, allowing us to confirm that the methodology used for the little gull CRM is appropriate.	
D2-REP2037-20	<p>NE Ref 4, Section 3.2</p> <p><u>Key Concern and/or Update</u></p> <p>We also welcome the Applicant's review of the in-combination assessment for little gull and note that it has led to a slight increase in the total predicted collisions.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>Natural England will review the "gap-filling" methodology used by the Applicant to update the in-combination assessment and advise on a final conclusion around the impact on this species at Deadline 3.</p>	The Applicant welcomes this response and will provide a response to any comments received from NE if required.
D2-REP2037-21	<p>NE Ref 5, Section 4</p> <p><u>Key Concern and/or Update</u></p> <p>We welcome the analysis the Applicant has undertaken to investigate the effect of increasing turbine hub height on lesser black-backed gull impacts. The analysis demonstrates that for project alone impacts, increasing the air gap from 25 to 30m leads to a c.23% decrease in estimated collisions. However, we accept that given the low numbers of collisions predicted, the overall benefit from increasing the air gap is minor, particularly when considered in the context of apportioned in-combination impacts.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>We accept that the Applicant has sufficiently demonstrated that this mitigation measure is unlikely to affect the outcome of the assessment, nor lead to a material improvement in terms of the Project's impact on the lesser black-backed gull feature of Morecambe Bay and Duddon Estuary SPA and Ribble and Alt Estuary SPA.</p>	The Applicant welcomes this response. As evidenced by the Applicant in an Offshore Ornithology Technical Note 1 (EIA) (REP1-080) submitted at Deadline 1, increasing the air gap above 25m would make a very small difference to the predicted mortality, particularly when considered for the cumulative effect. Therefore, as there would be no measurable mitigation benefit, the Applicant confirms that no further increase in air gap is proposed.
Appendix B6 to Natural England's Deadline 2 Submission Natural England's comments on (REP1-082) 9.24 Offshore Ornithology Technical Note 3_RTD at Liverpool Bay SPA Update Assessment		
D2-REP2037-22	<p>Major/Complex comments</p> <p>In formulating these comments, the following documents have been considered:</p>	The Applicant notes this response.

ID	Comment	Applicant's Response
	REP1-082 9.24 Offshore Ornithology Technical Note 3_RTD at Liverpool Bay SPA Update Assessment	
D2-REP2037-23	<p><i>1.1 Summary</i></p> <p>The Applicant has presented additional analysis of the Project's impact on the red-throated diver feature of Liverpool Bay SPA. While this adds useful context, Natural England continue to advise that an adverse effect on integrity (AEOI) cannot be ruled out due to the displacement effects of the Project on the distribution of this feature within the site, which has "restore" conservation objective attributes with respect to feature distribution and availability of supporting habitat.</p>	<p>Natural England's response on this matter is noted. However, the Applicant maintains that it has presented sufficient evidence within the Report to Inform Appropriate Assessment (RIAA) (REP1-012) and Offshore Ornithology Technical Note 3 (REP1-082) to enable the ExA to advise the Secretary of State that no Adverse Effect on Integrity (AEOI) can be concluded for the red-throated diver feature of Liverpool Bay Special Protection Area (SPA), in line with the Round 4 Plan Level Habitats Regulations Assessment (HRA) conclusions on potential red-throated diver impacts.</p>
D2-REP2037-24	<p>The technical note contains an incorrect statement regarding Natural England's position on Awel-y-Môr OWF. We must clarify that Natural England was not an Interested Party (IP) in the Examination of Awel-y-Môr OWF and therefore did not have a position regarding the impact of this OWF on the red-throated diver feature of Liverpool Bay SPA. This is because the project was not thought to impact upon nature conservation receptors in England, including the part of Liverpool Bay SPA in English waters.</p>	<p>The Applicant notes Natural England's comments on this matter. However, it remains the case that Natural England, in its letter to the Planning Inspectorate of 16 March 2023 in respect of the Report on the Implications for European Sites (RIES) for the Awel y Môr project, stated that '<i>Natural England defer to NRW's advice regarding European sites within Wales and Welsh waters and sites that cross the English/Welsh border. For European sites solely within England or English waters, Natural England does not have any concerns relating to effects from the proposed development.</i>'</p> <p>The usual interpretation of 'defer' in this context is '<i>To allow someone to make decisions or tell you what to do, or to accept their opinion or instructions, because of your respect for them or because of their higher rank, authority, knowledge, etc.</i>' (Cambridge Online Dictionary, 2024). This is the Applicant's interpretation of this usage, as is the case for example, when the Marine Management Organisation (MMO) 'defers' to Natural England on matters related to designated sites.</p> <p>Whether or not this was Natural England's intended meaning, it is the basis upon which the Secretary of State made their decision on the Awel y Môr project, and the</p>

ID	Comment	Applicant's Response
		Applicant maintains that it was reasonable to interpret Natural England's response as agreement with Natural Resource Wales (NRW's) position. The Applicant also highlights that there is no separate Welsh and English red-throated diver population within Liverpool Bay SPA, and advice should be consistently applied across the whole site, irrespective of the Statutory Nature Conservation Body (SNCB) that is providing that advice.
D2-REP2037-25	Our position that AEOL on Liverpool Bay SPA cannot be ruled out from the Morecambe OWF is consistent with advice provided to other OWFs elsewhere in English waters. We continue to advise that the most effective way to mitigate the impact is to limit the distance from the original SPA boundary at which turbines are built.	The Applicant notes this response. The Applicant maintains its position that a 10km buffer from the original Liverpool Bay SPA boundary as proposed by Natural England (RR-061; NE Ref. B2) would result in the Project site becoming commercially unviable for further development as an Offshore Windfarm (OWF).
D2-REP2037-26	Natural England welcomes continued engagement from the Applicant alongside the Examination process to progress resolutions to these issues.	The Applicant welcomes this response.
D2-REP2037-27	<p>NE Ref 1, Section 2.2</p> <p><u>Key Concern and/or Update</u></p> <p>The Applicant asserts that the area within the original SPA boundary potentially impacted by the project is of low importance to red-throated divers, as the densities recorded there are lower than elsewhere in the SPA. Natural England do not consider this to be a particularly pertinent argument, as the location of the original SPA boundary was drawn with respect to an objective and repeatable analysis that identified the most important parts of the wider area surveyed for red-throated diver. This analysis led to the inclusion of the impacted area within the SPA, as part of the 'most suitable territories' for the species. Comparison of the respective importance of different areas within the SPA should therefore not detract from the fact that the impacted area was classified as part of an SPA for a nationally important population of red-throated diver.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>For information only</p>	The Applicant notes Natural England's comments on this matter. Notwithstanding this position, the Applicant maintains that it is hard to argue that the 'distribution' objective for red-throated diver would be affected when few, if any, red-throated divers are present within the area of the SPA potentially impacted by the Project.
D2-REP2037-28	NE Ref 2, Section 2.3	The Applicant notes Natural England's comments on this matter.

ID	Comment	Applicant's Response
	<p><u>Key Concern and/or Update</u></p> <p>We welcome the Applicant's review of existing traffic within the affected area as it provides useful contextual information about the SPA. The review found relatively high levels of helicopter traffic within the affected area, associated with nearby offshore gas platforms. Further information would be useful. It seems likely that the gas platform was in use at the time that the SPA was designated and the helicopter traffic was comparable at that point, in which case it may have already been exerting a negative disturbance impact on the distribution of the divers within that area. yet the area was nonetheless considered to be of sufficient importance to be included within the SPA boundary. Similarly vessel traffic is likely to have been high in parts of the SPA at the time of the classification, but that did not reduce the level of diver usage to a level that meant the impacted area was not within the SPA</p> <p>It should also be recognised that helicopter and vessel traffic exerts a temporary disturbance effect, while offshore wind farms have a continuous, long term impact. Currently, any time that the helicopter or vessel traffic within the area lessens or ceases, the disturbance effect is reduced and the area becomes potentially available as habitat for the divers. Once the Project is built, a perpetual displacement effect would be exerted. It is therefore reasonable to consider the displacement effects of the Project within the affected area as potentially having an impact on the distribution of the feature regardless of existing levels of helicopter and vessel traffic.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>For information only</p>	<p>The Applicant is not aware of any available evidence to determine the extent of disturbance that would have occurred at the time that the SPA was designated. The Applicant maintains that helicopter and vessel traffic is currently affecting the distribution of red-throated diver within that part of the SPA, based on the evidence presented in Offshore Ornithology Technical Note 3 (REP1-082). Similarly, the Applicant is not aware of any evidence to support Natural England's assertion that the effects of ship and helicopter traffic are temporary, given the understanding that there is an expectation that existing gas facilities will be repurposed at the end of their life, and it is therefore likely that such activities would continue. There seems little difference between the regular and routine disturbance from helicopter and vessel traffic, which may continue for a significant period (potentially decades) and the presence of a windfarm, which is itself time-limited by the consent.</p>
D2-REP2037-29	<p>NE Ref 3, Section 2.4</p> <p><u>Key Concern and/or Update</u></p> <p>The Applicant has restated their position regarding the "effective displacement area". Natural England have already advised that, whilst we recognise the desire to factor in the diminishing displacement effect to the assessment, we do not agree with this method of assessing displacement impacts, as it underestimates the area over which some level of displacement effects would occur.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>For information only</p>	<p>The Applicant notes Natural England's comments on this matter, but maintains that it is reasonable and appropriate to take into account the diminishing effect as distance from the windfarm increases, for the reasons set out in Offshore Ornithology Technical Note 3 (REP1-082).</p>

ID	Comment	Applicant's Response
D2-REP2037-30	<p>NE Ref 4, Section 2.5</p> <p><u>Key Concern and/or Update</u></p> <p>The Applicant states: "It is acknowledged by the Applicant that the small relative contribution of the Project is not strictly relevant when considering the total in-combination effect. However, it is the case that there must be a threshold of effect that is considered by NE to generate an AEoI, and below which AEoI can be ruled out. In this case, therefore, it appears that NRW (and by proxy NE) considered that the effect up to and including Awel y Môr OWF was below such a threshold"</p> <p>The assertion highlighted in bold above is incorrect. Awel-y-Môr OWF sits entirely within Welsh territorial waters and Natural Resources Wales (NRW)/Joint Nature Conservation Committee (JNCC) are therefore the relevant statutory nature conservation bodies. Natural England did not register as an interested party for the Awel-y-Môr OWF Examination, and hence provided no position during the Examination process. Whilst the SNCBs strive for alignment in the advice we provide, this does not mean that the position of one can automatically be considered to be shared by the other. In any event, as highlighted in our Relevant Representations (B34) NRW/JNCCs advice on Awel-y-Môr OWF took into account site-specific factors. We note there is a cluster of existing windfarms in the vicinity of Awel-y-Môr OWF, including three long-standing projects that are likely to have depressed diver densities in this part of the SPA (Rhyl Flats and North Hoyle, Burbo Bank) as well as the more recent developments (Burbo Bank Extension, Gwynt y Môr) that the Applicant has presented displacement buffers for. This congested situation contrasts with the northern part of the SPA, where only the displacement buffer of West of Duddon Sands OWF impinges on the SPA boundary.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>We highlight that Natural England have advised since the application process of Burbo Bank Extension that adverse effect on the red-throated diver feature of Liverpool Bay SPA due to impacts on the distribution of the feature and the availability of supporting habitat cannot be ruled out.</p> <p>For information only.</p>	<p>The Applicant notes Natural England's comments on this matter, but maintains that that as there is no separate Welsh and English red-throated diver population within Liverpool Bay SPA, advice should be consistently applied across the whole site, irrespective of the SNCB that is providing that advice. Further information to support this position is set out in Offshore Ornithology Technical Note 3 (REP1-082).</p>

ID	Comment	Applicant's Response
D2-REP2037-31	<p>General</p> <p><u>Key Concern and/or Update</u></p> <p>This technical note provides useful information for consideration of the potential impacts of the Project on the distribution of the red-throated diver feature of Liverpool Bay SPA. However, it does not alter Natural England's position that the feature will be negatively impacted by the displacement effect of the Project across 18km² of the SPA. We consider that the SPA is already adversely affected by the combined impacts of multiple OWFs within and near the SPA boundary, which limit the distribution/supporting habitat availability of the red-throated diver feature. Given the site conservation objectives to restore the distribution of the feature and prevent deterioration from its current level, every effort should be made to minimise the impact of the Project. This is consistent with advice Natural England has previously given regarding impacts on red-throated diver at Liverpool Bay and elsewhere.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>Natural England continues to advise that the Project adversely effects on the red-throated diver feature of Liverpool Bay SPA. We continue to advise that the most effective way to mitigate the impact is to limit the distance from the original SPA boundary at which turbines are built. We advise that the Applicant considers implementing such measures and encourage them to explore the feasibility of different impact reduction options.</p>	<p>The Applicant notes Natural England's comments on this matter, but refers to the points above and the evidence presented in the RIAA (REP1-012) and Offshore Ornithology Technical Note 3 (REP1-082).</p> <p>Discussions have been held, and continue, with Natural England evaluating the windfarm site boundary, including consideration of potential buffers where turbines would not be placed to support co-existence with other marine users. To maintain Project viability the increase in distance to 10km, as proposed by NE (RR-061 (NE ref B2)) is not commercially feasible.</p> <p>As such, and as requested by the ExA in Written Questions, a without prejudice derogation case together with securable compensation measures has been submitted at Deadline 3 for the Liverpool Bay SPA red-throated diver feature (Habitats Regulations Assessment Without Prejudice Derogation Case – Red-Throated Diver at Liverpool Bay / Bar Lerpwl SPA, Doc Ref 9.37).</p> <p>The Applicant maintains its position that there would be no adverse effect on integrity for the red-throated diver feature as a result of the Project, as concluded in the Round 4 Plan Level HRA and the Applicant's RIAA (REP1-012).</p>
Appendix B7 to Natural England's Deadline 2 Submission Natural England's comments on (REP1-093) 9.30 Update on Without Prejudice Compensatory Measures		
D2-REP2037-32	<p>Major/Complex comments</p> <p>In formulating these comments, the following documents have been considered:</p> <p>REP1-093 9.30 Update on Without Prejudice Compensatory Measures</p>	<p>The Applicant notes this response.</p>
D2-REP2037-33	<p>1.1 Summary</p> <p>The Applicant has presented an update on progress with the preparation of potential compensation measures. Natural England is engaged with this</p>	<p>The Applicant welcomes this response.</p>

ID	Comment	Applicant's Response
	process and considers that the compensation options presented are likely to be feasible and effective.	
D2-REP2037-34	<p>NE Ref 1, Section 3.1.3; 23/25</p> <p><u>Key Concern and/or Update</u></p> <p>We welcome the reported progress made in relation to the Banks March predator-exclusion fence in the Ribble and Alt Estuaries SPA. We appreciate that this proposed project is still in the planning stages and agree that the area quoted, at approximately 1750 Ha could theoretically provide more than enough habitat to satisfy any compensation requirement (if deemed necessary) if a sufficiently large area is suitable as lesser black-backed gull nesting habitat. We understand that a draft feasibility study has been completed by the RSPB for the Banks Marsh mega fence. however, it has not yet been made available in Examination documents. We therefore make the following comments on the Banks Marsh option whilst acknowledging that more information may be contained in the study report.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>We are aware that the Applicant would be making a financial contribution towards the construction and maintenance of the enclosure, rather than managing Banks Marsh itself. However, it is not yet clear how much of the 1750 Ha quoted is considered currently suitable habitat for nesting gulls, how much has previously been used by gulls (noting an apparent complete colony collapse since 2022), nor how much will be assigned to the without-prejudice compensation project.</p> <p>In addition, we are aware that some of this area is not protected by a new embankment, is consequently liable to flooding at certain times (e.g. high spring tides), and this has previously resulted in reduced lesser black-backed gull breeding success. We understand that climate-related higher tides (amongst other things) cannot be ruled out as a contributory factor in the recent colony collapse.</p> <p>As such, we consider it would be useful if an indicative location and figure for the extent of land suitable for nesting gulls could be provided, including the area to be monitored for the purposes of satisfying any compensation requirement (if deemed necessary).</p> <p>Some consideration of the future impacts of climate change on flooding extent and periodicity within the potential timescale of compensation (if</p>	<p>The Applicant advises that discussions on the Banks Marsh 'megafence' potential compensation measure are ongoing and to date, the RSPB Feasibility Study is only available in draft form. The Applicant thanks NE for their comments on the proposal and will feed these into further discussions on the draft Feasibility Study to ensure that the issues raised can be captured and addressed in the final report, which will inform a future decision on the viability of the proposal as a suitable compensation option for the Project.</p> <p>It should be noted that the Applicant has made significant progress in further developing the Steep Holm Lesser Black-Backed Gull (LBBG) 'without prejudice' compensation option (see Update on Without Prejudice Compensatory Measures (REP1-093)) which, as indicated in NE's Risks and Issues Log submitted at Deadline 1 (REP1-097 and REP1-098) that each measure alone is 'likely to be effective' (see WR-097-73) and would be sufficient alone to compensate for potential impacts on LBBG from the Project, in the event that the Secretary of State decide that compensation is required for this feature.</p>

ID	Comment	Applicant's Response
	required), i.e. approximately the next 40 years, which includes the period of construction plus the 35-year lifespan of Morecambe OWF would also be useful.	
D2-REP2037-35	<p>NE Ref 2, Section 26</p> <p><u>Key Concern and/or Update</u></p> <p>We note the reference to the success of predator-exclusion fence enclosures at Hesketh Out Marsh East and Hesketh West in 2021 and autumn 2022 which has resulted in 2022 and 2023 in “over 40 pairs within the fenced area with productively reaching 1.55 chicks per pair in 2023”. It is unclear what species this refers to.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>We assume this refers specifically to lesser black-backed gull but please clarify the species involved.</p>	<p>The Applicant can advise that the Hesketh Out Marsh East and Hesketh West predator exclusion fence was targeted to improve breeding viability for waders and terns. Monitoring work focused on those bird species and the quote referenced by NE therefore relates to wader and tern species.</p>
D2-REP2037-36	<p>NE Ref 3, Section 3.1.4; 30</p> <p><u>Key Concern and/or Update</u></p> <p>We welcome the progress being made with the proposed habitat management on Steep Holm Island.</p> <p>We are aware however that several attempts at visiting Steep Holm in summer and autumn 2024 were cancelled due to prevailing weather conditions restricting transit. We recognise that the Applicant has no control over the weather and accept that there may be occasions when visits to Steep Holm are not possible.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>We would nevertheless reiterate the advice we provided in our response to the 4.11 Habitats Regulations Assessment Without Prejudice Derogation Case submitted at application, that, should this measure be adopted, opportunities for scrub clearance are maximised at an appropriate time of year (i.e. September to February), subject to landowner agreement, whenever they become available within this timeframe to mitigate the risk that these essential elements of the project cannot be undertaken. This is also the case for nest/productivity monitoring/colour ringing (May to July).</p>	<p>The Applicant notes Natural England's comments, and agrees that it will be necessary to provide as much flexibility as possible to enable the proposed habitat management works on Steep Holm to be undertaken. It is also worth noting that the main vessel operator servicing the island has described the conditions during 2024 as 'exceptional', with the highest recorded number of cancelled sailings in a year. It is therefore hoped that future years will not be so constrained.</p> <p>Nonetheless, the Applicant can confirm that it would be seeking every available opportunity to ensure that management and monitoring works were completed in a timely manner. Scrub clearance works are being planned between September and February and productivity monitoring is being targeted for Spring/Summer 2025, weather permitting.</p> <p>It is also noted that NE representatives are core members of the Steep Holm Lesser Black-Backed Gull Compensation Steering Group, which held their first formal meeting on 7 January 2025. As such, NE are able to directly input into on-going discussions on the timing of</p>

ID	Comment	Applicant's Response
		scrub clearance and bird monitoring works at Steep Holm as implementation plans for this measure progress.
D2-REP2037-37	<p>NE Ref 4, Section 3.2.4; 37</p> <p><u>Key Concern and/or Update</u></p> <p>We confirm that we see no issues with any necessary NE-related consents (e.g. SSSI consent) for the proposed scrub clearance works on Steep Holm.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>For information only</p>	The Applicant welcomes this response.
D2-REP2037-38	<p>NE Ref 5, Section 48/49</p> <p><u>Key Concern and/or Update</u></p> <p>We note that a flood risk activity environmental permit application will need to be made to the Environment Agency for works on a floodplain for the Banks Marsh mega fence. We understand that for the majority of its route, the mega fence will be replacing existing enclosure infrastructure (fences, gates etc.) and no issues have been raised during informal consultation of local Environment Agency staff.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>Nevertheless, we would encourage the Applicant to ensure the necessary permissions are pursued as soon as possible such that we can have confidence this proposal can be progressed if considered necessary.</p>	The Applicant welcomes NE's response. The RSPB are leading on construction of the megafence and the contract is currently out for tender. The Project understands that the successful installation contractor would be responsible for securing the necessary environmental permit (pers comm, Natural England 2025), however as stated in NE's comment here, no issues have been raised during informal consultation with local Environment Agency staff.
D2-REP2037-39	<p>NE Ref 6, Appendix B</p> <p><u>Key Concern and/or Update</u></p> <p>We welcome consideration of the Health and Safety aspects of the proposed Steep Holm habitat management option and note that hazards have been identified and solutions either proposed or currently subject to further consideration (e.g., lack of hot running water for showers). Should this latter issue be unresolvable we accept that daily visits rather than stays over multiple nights may be necessary.</p> <p><u>Natural England's Advice to Resolve Issues</u></p> <p>We recognise that the health and safety of all those involved in this project is of the utmost importance and overrides all other considerations.</p>	The Applicant welcomes this response.

ID	Comment	Applicant's Response
Appendix G to Natural England's Deadline 2 Submission Natural England's comments on the Offshore in Principle Monitoring Plan (APP-148)		
D2-REP2037-40	1. Introduction Natural England welcomes the submission of the Morecambe Generation Offshore In-Principle Monitoring Plan (IPMP) as part of the application. Further, we welcome the Applicant's inclusion of the general guiding principles for proposed monitoring (Section 1.3). We also refer the Applicant to Natural England's Best Practice Advice document which sets out our expectations in terms of monitoring. This document is available at: Environmental considerations for offshore wind and cable projects - Phase IV Best Practice Advice for Post-Consent Monitoring, Version 1.0, July 2022.pdf. Relevant sections are also included in Annex A of this document for reference.	The Applicant notes this response.
D2-REP2037-41	This document outlines Natural England's overarching concerns with the Offshore IPMP (APP-148), particularly in relation to the overall aim of ensuring adaptive monitoring and remediation is secured within the DCO. In addition, this document provides further advice on each of the offshore nature conservation receptors: physical processes, benthic subtidal ecology, fish and shellfish ecology, offshore ornithology, and marine mammals.	The Applicant has responded to each point in detail below.
D2-REP2037-42	2. Overarching Concerns with the IPMP Natural England advises that this is a live document which is updated throughout examination and post consent to reflect the outcome of discussions and/or monitoring.	The Applicant notes this response. The Applicant will update the In Principle Monitoring Plan (IPMP) in the examination (with an updated provided at Deadline 3) and post consent when changes to the Plan require further consideration and approval.
D2-REP2037-43	In recognition of the emphasis being placed by projects currently in the post consent phase on the IPMP when setting the monitoring requirements and parameters; Natural England highlights the importance of this document. Natural England emphasises the requirement to agree the scope of the IPMP and hypotheses which will be tested by the monitoring as part of the consenting phase.	The Applicant notes this response. The Applicant agrees that discussions on monitoring are important during the consenting process and allow time for appropriate planning by the Project (for example the Applicant has been discussing with NE any need for pre-construction monitoring of Red Throated Diver (RTD) in addition to that already undertaken as part of the EIA, in case this is deemed to be required for post construction monitoring), however the Applicant maintains that agreement and details of monitoring would be developed further post-

ID	Comment	Applicant's Response
		consent in line with refined Project design. The IPMP has been updated for Deadline 3 to clarify the hypotheses that will be tested for biological elements of the proposed monitoring works.
D2-REP2037-44	<p>Overall, Natural England feels that much more detail is required than is provided in the IPMP in its current form. For example;</p> <ul style="list-style-type: none"> What are the hypotheses the monitoring will be testing and how do they relate to the assessments undertaken in the ES? How will the monitoring be designed to ensure that the desired outcomes can be achieved i.e. is the monitoring fit for purpose? What are the indicative timings of the surveys? Can lessons be learnt from previous thematic surveys and how will modifications to surveys design be incorporated between survey campaigns? What does 'success' look like to demonstrate that no further monitoring is required? <p>What happens if the results do not support the null hypothesis? Is further monitoring required (with/without modifications)? If impacts are greater than predicted, do actions need to be undertaken to address these impacts? How will further monitoring and actions be secured, is a change to the wording of the dML required? And if so, how will success of any action/s be monitored and what will be the success criteria before monitoring can cease?</p>	<p>Where possible, and appropriate to do so, the Applicant has added further detail in the IPMP (In-Principle Monitoring Plan_Rev 02 Clean (Document Reference 6.4)) describing the potential hypotheses/questions that will be tested, subject to development of the detailed monitoring plans and the guiding principles of the document have been updated where appropriate to account for the suggested detail proposed by NE. However fundamentally the position remains that the IPMP is intended to provide a framework for further discussions post consent for the reasons already set out. This approach is consistent with the final IPMP submitted for EA1N/2 (EN010077 Deadline 8 Submission - 8.13 EA1N Offshore In-Principle Monitoring Plan (Clean) - Version 4) and Dudgeon Extension Project (DEP)/Sheringham Extension Project (SEP) for which the consent has been granted (EN010109 Deadline 7 Submission - 9.5 Offshore In-principle Monitoring Plan (Revision C) (Clean)).</p>
D2-REP2037-45	<p>To answer the above, Natural England considers the IPMP should focus on what the uncertainties and evidence gaps of the EIA and/or HRA are, rather than repeating the outcomes of the EIA only (Sections 2.2 – 2.6). We consider that establishing and agreeing the uncertainties and evidence gaps of the EIA and/or the HRA is necessary to inform what monitoring should be undertaken.</p>	<p>One of the guiding principles of the Offshore IPMP is that monitoring should be targeted to address significant evidence gaps or uncertainty, which are relevant to the project and can be realistically filled, as well as those species or features considered to be the most sensitive to the Project's impacts including those of conservation, ecological and/or economic importance. This has been accounted for, considering the Environmental Statement (ES) and RIAA (noting that the HRA will be completed by the SoS and as such some uncertainty of final conclusions until that is produced) in the development of the in-principle</p>

ID	Comment	Applicant's Response
		<p>proposals in the IPMP and will inform the further development of the detailed monitoring plans.</p> <p>The precautionary approach applied in the Applicant's assessments are also designed to account for inherent uncertainty.</p> <p>Following further discussion with Natural England and feedback on the assessments submitted with the DCO Application (including the ES and RIAA), clarity has been added to the IPMP to reflect those areas of uncertainty.</p>
D2-REP2037-46	<p>As per the Applicant's 'General Principles and Guidance' (Section 1.3) Natural England advises an approach mechanism in which the Applicant presents a clearly defined hypothesis or null hypothesis of no impact would be beneficial. Monitoring thereafter would aim to test this. We advise a review period during which Statutory Nature Conservation Bodies (SNCBs) and regulatory bodies such as the Marine Management Organisation (MMO) are consulted by the Applicant to assess the results of the first period of monitoring. For example, one mechanism that could be introduced for particular receptors would be a live document which is reflective of what the monitoring is observing, including consideration of species/habitat recovery.</p>	<p>The Applicant notes that, in practice, the MMO consults with key stakeholders including Natural England on the results of the monitoring as it is reported and considers that this provides the appropriate mechanism to review and agree any necessary changes to the monitoring programmes going forward from that point.</p> <p>Where possible and appropriate to do so, the Applicant has added further detail describing the potential hypotheses/questions that will be tested, subject to development of the detailed biological monitoring plans. However fundamentally the position remains that the document is only intended to provide a framework for further discussions post consent for the reasons already set out. This approach is consistent with the final IPMP submitted for EA1N/2 (Deadline 8 Submission - 8.13 EA1N Offshore In-principle Monitoring Plan (Clean) - Version 4) and Dudgeon Extension Project/Sheringham Extension Project (DEP/SEP) for which the consent has been granted (Deadline 7 Submission - 9.5 Offshore In-principle Monitoring Plan (Revision C) (Clean)).</p>
D2-REP2037-47	<p>We advise that monitoring should be effective in providing sufficient evidence pre-construction to inform the deployment of mitigation measures, and similarly demonstrate the efficacy of mitigation measures during construction and post- construction. This is important to demonstrate compliance with the measures identified in assessments to mitigate significant impacts. It is also important to provide evidence to assess the significance of adverse effects,</p>	<p>The Applicant considers that such an amendment would not be necessary or appropriate. If monitoring work identified a potential need for adaptive management or remedial measures, then the Applicant would discuss with the relevant parties (i.e. Natural England and the MMO) at the relevant time what an appropriate course of action</p>

ID	Comment	Applicant's Response
	evaluate the success of mitigation measures and to help inform whether further remedial measures are required.	would be. Such measures may themselves require a separate consent or agreement before they could be implemented (e.g. a marine licence for works to the seabed). It will therefore not necessarily be within the Applicant's power to immediately undertake such works and therefore it is not appropriate to seek to impose such a requirement through the Deemed Marine Licence (dML).
D2-REP2037-48	<p>In relation to remedial measures, Natural England wishes to highlight the importance of ensuring that all relevant monitoring proposals for Morecambe Generation (and/or associated DCO/dML conditions) consider the aim of securing a mechanism for adaptive monitoring when unforeseen impacts are detected. Thus, ensuring remedial measures (i.e., adaptive management) are triggered should the results of monitoring demonstrate impacts that are significantly greater than predicted and/or incorrect assumptions were made following review of the conclusions of the environmental statement and supporting documents. We advise that the potential for certain monitoring to trigger the development of countermeasures (with associated monitoring of those measures) should be clearly stated in relevant tables of the IPMP and incorporated into the DCO conditions where relevant.</p>	<p>The Applicant has, however, amended the principles of the IPMP (In-Principle Monitoring Plan_Rev 02 Clean (Document Reference 6.4)) to clarify that adaptive management may be required and has added evaluation of the success of mitigation measures to relevant tables of the IPMP where appropriate.</p>
D2-REP2037-49	<p>3. Nature conservation thematic advice</p> <p><i>3.1 (Section 2.1) Engineering and design related monitoring</i></p> <p>It is unclear to Natural England if this also encompasses monitoring surveys to inform final project design including those required to inform mitigation measures such as avoidance of certain sensitive receptors particularly environmental ones. If so, it would be useful if the Applicant could specify the purpose of each aspect of the engineering and design related monitoring in full. We highlight that geotechnical investigations will be critical to inform the cable burial risk assessment and in relation to reducing down the direct or indirect impacts to environmental receptors. We request that further details are provided to answer the questions posed in our overarching comments.</p>	<p>Geophysical and geotechnical surveys will be undertaken to provide further information on ground conditions which will inform the design process, including siting of infrastructure. This information will include identification of hazards and obstructions, including the potential for archaeological features or Unexploded Ordnance (UXO).</p> <p>Information provided by these surveys may identify areas of preferable ground conditions and will inform the most suitable technology and installation techniques.</p> <p>While no Annex 1 reef been identified in baseline surveys to date, the pre-construction geophysical surveys will also be analysed for potential Annex 1 reef to confirm absence or inform any amendments to proposed construction areas, noting that the final location of infrastructure will be provided for approval in the design plan. It is also noted that the Applicant has added the requirement in the dDCO to microsite around Annex 1 reef should presence be detected in pre-construction surveys. Effects on the habitats identified during baseline surveys have been assessed as part of the EIA process and this micrositing</p>

ID	Comment	Applicant's Response
		<p>for other benthic features is not considered likely to be required.</p> <p>The Applicant notes that geotechnical investigations will be critical to inform the cable burial risk assessment and in relation to reducing down the direct or indirect impacts to environmental receptors and has updated the IPMP to include all phases of the development for engineering surveys. More general updates have also been made to the IPMP principles at Deadline 3 to clarify the purpose of the proposed surveys.</p>
D2-REP2037-50	<p><i>3.2 (Section 2.5) Marine Mammals</i></p> <p>Natural England notes that the Applicant did not propose monitoring for marine mammals within the Mitigation and Monitoring Schedule document and the Offshore IPMP. Natural England does not agree that because no significant impacts are predicted, no monitoring is required. Currently the only post-consent monitoring that has been proposed is the industry-standard monitoring of underwater noise from the first 4 piles. However, monitoring undertaken as part of the Marine Mammal Mitigation Plan (MMMP) should not be considered post-consent monitoring as it does not meet is concerned that no monitoring has been outlined that would evidence the impacts to marine mammals e.g. monitoring of animal responses to impacts, including mitigated impacts. We highlight that some of the impact pathway assessments factor in mitigation to conclude no significance, therefore validating the effectiveness of the mitigation is a reasonable aim for monitoring. There has been no consideration of the areas of the assessment where assumptions have been made and where the project could contribute to filling knowledge gaps that would inform the project's assessment.</p>	<p>As part of the final Marine Mammal Mitigation Protocol (MMMP) the mitigation to prevent auditory injury of marine mammals will be agreed. The Applicant has also set out an Outline Underwater Noise Management Strategy (REP2-026) as a mechanism to secure the mitigation required (including any additional mitigation for disturbance) and to consider the impacts of the final design of the Project.</p> <p>Monitoring of the first 4 piles will determine that the maximum piling energies assessed within the ES are not being breached, and therefore the mitigation defined in the draft MMMP and to be confirmed in the final MMMP is appropriate and effective.</p> <p>Given the proposed aerial surveys for red-throated diver submitted at Deadline 1 (REP1-082), and the presence of harbour porpoise detected in baseline surveys, it is anticipated that analysis of these data for marine mammal abundance (winter months only) could be undertaken to provide further information to inform marine mammal monitoring.</p> <p>The IPMP does acknowledge in Table 2.3 the guiding principle to test any uncertainties in the ES and RIAA, however it is considered that the requirement for and specific detail of marine mammal monitoring can only be agreed post consent following detailed design of the Project and the determination of mitigation measures</p>

ID	Comment	Applicant's Response
		through the MMMP and UWSMS. While it is not considered there is any need for commitments to strategic marine mammal monitoring given the non-significant conclusions of the ES assessments in Chapter 11 Marine Mammals (APP-048) and the RIAA (REP1-012), the timing of construction at other nearby projects would also need to be factored into any monitoring requirements, given the potential overlap in construction activities and potential influence of these on marine mammal behaviour in the region which could affect monitoring results.
D2-REP2037-51	Therefore, we advise that further detailed discussion is required on the monitoring plans. We understand that this is proposed to occur post-consent. However, at present we have limited understanding, and therefore low confidence, in how the monitoring will evidence the outcomes of the marine mammal assessments. The Applicant should revise the In Principle Monitoring Plan (IPMP) in discussion with Natural England. Detailed requirements for In Principal monitoring (IPMP), can be found in: Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards Phase IV: Expectations for monitoring and environmental requirements at the post-consent phase. This document outlines Natural England's recommendations for an effective IPMP and should be considered when planning monitoring post-consent.	As noted above there are limitations to the level of detail that can be added at this stage, however updates to the IPMP (In Principle Monitoring Plan_Rev 02_Clean (Document Reference 6.4)) have been made at Deadline 3 and the Applicant will engage further with Natural England on this matter. The Applicant can confirm (as now clarified in the updated IPMP) that Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards Phase IV: Expectations for monitoring and environmental requirements at the post-consent phase has been considered in drafting the document.
D2-REP2037-52	<p><i>3.3 (Section 2.6) Ornithology</i></p> <p>Natural England is concerned that no pre and post construction Ornithology monitoring is secured within the DCO/dML at conditions 14 and 16. Given the potential disturbance and displacement impacts to Liverpool Bay SPA Red Throated Diver population, it is unlikely that any changes in abundance and distribution could be determined without both pre and post construction monitoring. In addition, Natural England is currently in the process of reviewing documents submitted at Deadline 1 and therefore until this is completed, we are unable to advice further on potential Ornithology monitoring requirements. Once our review is complete, we would welcome further discussion with the Applicant in regard to monitoring of key species.</p>	<p>The Applicant has proposed monitoring of red-throated diver and is in discussion with Natural England on this matter. The Applicant notes that the baseline aerial surveys undertaken for the EIA provide pre-construction information but the Applicant has asked Natural England to confirm if this is sufficient or if further surveys pre-construction would be requested.</p> <p>The Applicant has not identified any requirement for monitoring of other bird species in the IPMP, but will continue to discuss the matter with Natural England once their review of Deadline 1 and 2 documentation is complete.</p>

ID	Comment	Applicant's Response
Annex A: Natural England's Advice on an In-Principle Monitoring Plan (IPMP) extracted and summarised from: Environmental considerations for offshore wind and cable projects - Phase IV Best Practice Advice for Post-Consent Monitoring, Version 1.0, July 2022.pdf (Parker <i>et al</i> 2022)		
D2-REP2037-53	<p>1. Purpose of the IPMP document</p> <p>The outcomes of monitoring are necessary to:</p> <ul style="list-style-type: none"> validate the predictions that were made during the consenting phase; mitigate against unforeseen impacts; evidence the effectiveness/success of mitigation measures; inform adaptive management strategies <p>Therefore, it is important that the IPMP represents a useful document that ensures the monitoring commitments are detailed and can be referred back to throughout the monitoring process.</p>	<p>The Applicant notes the summarised information which has been considered in the development of the IPMP which has been submitted at Deadline 3. The Applicant notes this information is industry wide advice on the delivery of monitoring at the post-consent stage and as such, has not provided a detailed response to each item. However, where appropriate, the IPMP provided at Deadline 3 has been updated in line with NE advice (In Principle Monitoring Plan_Rev 02_Clean (Document Reference 6.4)). The detailed points raised here would be further considered in the development of the monitoring plans pre- and post-consent as detailed Project design progresses.</p>
D2-REP2037-54	<p>2. Advice relating to post-consent monitoring (PCM)</p> <p>The process and structure of the planning system, including post-consent monitoring, is currently under review by Government, Defra, Natural England and other bodies (see Section 3.1). Options for how PCM can be improved to increase our understanding of the marine environment, the effects of offshore wind development and provide information-rich data over relevant spatial and temporal scales are being considered, such as the promotion of strategic or collaborative monitoring (see Section 4.4). The following section provides Natural England's advice and recommendations for the production and delivery of receptor-specific monitoring plans at the post-consent phase.</p>	<p>The Applicant also notes in relation to the need for monitoring to validate predictions made in the consenting process that where there is a sufficient evidence base, monitoring is not required. Commercial wind farms have been constructed and operational in the United Kingdom (UK) for over two decades, and the Applicant considers that, in many cases, the assessment of impacts are now well understood. The Applicant also notes the precautionary approach taken in the ES that accounts for uncertainty or data limitations.</p>
D2-REP2037-55	<p>3. Natural England's recommendations</p> <p>Early and continued engagement with SNCBs – engagement with the relevant SNCB(s) is recommended at the earliest possible opportunity to agree the focus of monitoring plans and to allow for continual engagement as plans evolve.</p>	<p>The scope of the Project's EIA is wide, and many of the topics included in the ES conclude negligible or minor adverse effects (which are not significant in EIA terms). Therefore, it would be highly disproportionate to monitor all these receptors and potential effects, and there is no precedent to doing so.</p>
D2-REP2037-56	<p>Clear aims, objectives and hypotheses– post-consent monitoring plans should be targeted and have clear aims and hypotheses (Chambers <i>et al.</i> 2012; MMO, 2014; Lindeboom <i>et al.</i> 2015). Monitoring should be proportionate to the level of risk to biological receptors and should not be delivered for the sake of monitoring, but instead monitoring is seeking to address (MMO, 2014). This helps to collect data that is information rich, as</p>	

ID	Comment	Applicant's Response
	well as data rich (Wilding <i>et al.</i> 2017). Early engagement with NE or relevant SNCB is recommended to help agree monitoring plans.	
D2-REP2037-57	Detection of unforeseen impacts – post-consent monitoring should be targeted, with clear monitoring aims and objectives. Whilst PCM plans should not be designed to detect unforeseen impacts, the analysis of the results of PCM may identify unforeseen impacts which arise during offshore wind farm development across relevant spatial and temporal scales (MMO, 2014). If detected, unforeseen effects can be investigated through adaptive monitoring (see Section 4.3). Participation in collaborative or strategic-level monitoring projects may be also appropriate for identifying long term and lasting effects to marine receptors as a result of offshore wind development.	
D2-REP2037-58	Statistical power – the ability of a survey to collect a sufficiently large amount of data to make robust statistical inferences about changes is known as its power (Maclean <i>et al.</i> 2006). Where possible, power analyses should be undertaken before monitoring commences to inform the design of PCM to ensure sufficient statistical power in subsequent analyses to detect meaningful changes (Bennet <i>et al.</i> 2016). Projects should also aim to reduce dependence within or between sampling units and plan the statistical tests and/or modelling approach so that the nature and quantity of data collected is suited to conduct the required tests/modelling (Bennet <i>et al.</i> 2016; Noble-James <i>et al.</i> 2018). Early engagement with Natural England is recommended when considering the statistical power of analyses and how this is used to inform survey design, or if power analyses indicate that the expected statistical power may not be sufficient to draw meaningful conclusions.	
D2-REP2037-59	Uncertainty and significance – as set out within MMO (2014), uncertainty and significance are two important considerations when designing and implementing PCM plans. Uncertainty reflects the extent of error or assumptions that were made when predicting impacts. There is a greater need to monitor topics if there is higher uncertainty regarding the effects of an impact or resulting recovery of receptors. The significance of an impact is another important consideration for PCM and helps to inform whether further management or remedial measures are required (MMO, 2014).	
D2-REP2037-60	Sufficient duration – PCM should be of a suitable duration to capture lags in impacts to receptors being detected as some impacts may only be detectable after a duration of time, depending on the receptor and the	

ID	Comment	Applicant's Response
	monitoring objectives. In addition, PCM may be required to monitor the recovery of receptors after an impact has occurred (e.g., impacts from construction) or a compensation measure has been put in place. Monitoring plans should be designed to incorporate long term or lasting impacts to validate predictions made within the ES and to improve our understanding of long-term effects and recovery of marine receptors. Monitoring plans should also have a clearly defined criteria for when and how decisions will be made on the conclusion of monitoring during the post-consent phase, for example when monitoring will be deemed to have met the objectives of the monitoring programme. Refer to the adaptive management approach principle below (Section 4.3).	
D2-REP2037-61	Strategy for consequence – a key role of post-consent monitoring is to validate the predictions of the ES, HRA, EIA or MCZ Assessment (Section 4). Monitoring plans should therefore have a clear strategy for subsequent remedial action if the monitoring shows that the original conclusions are incorrect, such as the significance of an impact upon a receptor or the timeframe for its recovery (MMO, 2014). Thresholds can be used to set acceptable levels of change for some environmental indicators, which if exceeded, can trigger additional monitoring or the implementation of mitigation or management measures to avoid adverse effects (Bennet <i>et al.</i> 2016; Wilding <i>et al.</i> 2017).	
D2-REP2037-62	Sharing of data – in order to maximise the usefulness of post-consent monitoring, data and reports should be made publicly available and provided to the relevant data repositories, such as the Marine Data Exchange (MDE) and the Marine Environmental Data and Information Network (MEDIN). All reports should be supported by the source/raw data and provide a description of the collection methodology and protocols followed (MMO, 2014). Metadata and environmental metadata should also be made publicly available (Chambers <i>et al.</i> 2012). Natural England advise that PCM data should be shared within the relevant data repositories as a matter of best practice. This could be secured as a licence condition for projects.	
D2-REP2037-63	Maximise use of baseline characterisation data and existing data – where possible, data collected at the pre-application phase should be used to supplement post-consent monitoring data. The results of baseline characterisation surveys may also be useful to inform the design of post-	

ID	Comment	Applicant's Response
	consent monitoring plans (e.g., the key areas or receptors for monitoring to focus upon). There may also be suitable existing datasets which can be used to provide context or supplement site-specific monitoring data. However, the validity and suitability of existing datasets must be carefully considered if used beyond providing a historical context for subsequent monitoring data (Noble-James <i>et al.</i> 2018). Parker <i>et al.</i> (2022a) provides advice and principles for the use of existing data to inform baseline characterisation surveys.	
D2-REP2037-64	Comparable and standardised data – data should be collected and presented in a consistent format which, where possible, enables effective comparisons with other for backwards/forwards compatibility of monitoring methods over time. Data collection should follow the MEDIN data standards and guidelines as a matter of best practice. A consistent naming convention should also be followed. Species should be recorded using the World Register of Marine Species (WoRMS) list of accepted scientific names and biotopes should be recorded using the EUNIS classification system (EEA, 2019). A consistent and comparable approach also enables effective cumulative and in-combination assessments and improves the functionality of data repositories.	
D2-REP2037-65	Follow industry standards, methodologies and protocols – monitoring programmes should follow the current industry standards, methodologies and protocols as a matter of best practice. This may apply to data collection, handling or analysis (Chambers <i>et al.</i> 2012). Receptor-specific advice is provided within the relevant sections below. Whilst this document will be periodically updated to reflect evolving best practice for industry standards and survey methodologies, Natural England would welcome the opportunity to discuss proposals to use the latest industry monitoring methods, standards or protocols.	
D2-REP2037-66	Novel and emerging monitoring methods – Natural England acknowledges the role of offshore wind farm developers in exploring and testing new monitoring methods. Natural England supports innovation and welcomes the exploration of novel and emerging monitoring methods, such as environmental DNA (eDNA), or passive monitoring methods. Although there can be challenges presented by the relative novelty of some techniques in early stages, collaborative working can unlock many wider	

ID	Comment	Applicant's Response
	benefits if planned carefully. Early engagement with Natural England is recommended if novel approaches are proposed.	
D2-REP2037-67	Strategic / joined up approach – a strategic, collaborative or joined up approach can deliver monitoring programmes of a greater scale and scope, thereby providing a greater understanding of ecological impacts, sensitivity or recovery (see Section 4.4). Natural England strongly supports strategic or collaborative monitoring proposals and can provide bespoke advice on a case-by-case basis.	
D2-REP2037-68	4. Adaptive monitoring and discharge of conditions Adaptive monitoring is the process of evaluating data collected to date, to help inform the duration and/or design of further monitoring (Bennet <i>et al.</i> 2016). It can also be used to assess whether monitoring should continue or if the relevant licence conditions can be discharged (MMO, 2014). Adaptive monitoring can also inform on the requirement for further mitigation, compensation or restoration measures. Adaptive monitoring is of particular importance for where there is scientific uncertainty regarding lasting impacts or recovery of receptors (Bennet <i>et al.</i> 2016) or where monitoring is seeking to validate predictions of the ES, EIA, HRA or MCZ Assessment.	
D2-REP2037-69	<ul style="list-style-type: none"> Adaptive monitoring is relevant during the post-construction phase where monitoring is investigating changes to the natural environment and ecological receptors over an undefined timescale, such as until a receptor recovers. Licence conditions should incorporate flexibility over the duration of monitoring plans, to allow the results of monitoring surveys to inform the requirement for future surveys or the implementation of management measures (MMO, 2014). This helps to ensure monitoring programmes are delivering the agreed aims and objectives set out by the monitoring plans and ensure monitoring is proportionate to the level of data required. For example, if the ES predicted a full recovery of an MPA feature within a certain timeframe, monitoring may be required until full recovery has occurred and can be agreed between the applicant, SNCB and MMO as the relevant regulator. Conversely, if a receptor has demonstrated the predicted level of recovery, and if agreed by all parties, the requirement for additional post-construction surveys may be discharged early. 	

ID	Comment	Applicant's Response
	<ul style="list-style-type: none"> In addition, another aspect of adaptive monitoring is the flexibility of the monitoring plan. Due to the long timeframe between projects obtaining consent and completing PCM surveys after construction, monitoring plans need to capture the scope for changes to the methodology or focus of surveys over time. This may be due to new evidence or understanding of impacts to marine receptors, or due to new technology becoming available which enables more ambitious studies. For example, seabird tagging projects should allow for flexibility in methods as new tracking devices become available. Natural England can provide advice on a case-by-case basis. 	
D2-REP2037-70	<p>5. Collaborative / strategic monitoring</p> <ul style="list-style-type: none"> Delivering monitoring projects collaboratively could have many benefits for the collection of post-consent monitoring data and can help to answer key evidence gaps or research priorities. Collaborative monitoring could include joint monitoring programmes across zones or regions where projects pool resources to achieve monitoring aims, or where key research questions are divided between projects within a zone or region to allow sufficient time and resources to be dedicated to each question. Collaborative monitoring could also comprise individual offshore wind projects contributing data, money or resources to a strategic research project led by another organisation, such as by ORJIP or ORSMRF, to address shared research questions or evidence gaps. Working collaboratively allows for the pooling of resources and/or division of labour, which enables monitoring programmes to be of a greater scale and scope than possible on a project-specific basis. This enables data collection to produce useful and information-rich data over sufficient spatial and temporal scales to enhance our understanding of the marine environment and the effect of offshore wind development upon ecological receptors (Wilding <i>et al.</i> 2017). 	
D2-REP2037-71	<ul style="list-style-type: none"> In addition, collaborative monitoring could be undertaken over larger spatial and temporal scales than project-specific monitoring plans, which could enable the detection of wider community changes, unforeseen or long-term effects, and allow for greater statistical power in subsequent analyses. Some projects have worked collaboratively to address key shared questions of mutual interest at the post-consent phase (e.g., see 	

ID	Comment	Applicant's Response
	Section 6.3.1). If implemented effectively, this allows for the division of labour and allows multiple projects to undertake more insightful monitoring programmes than possible on an individual project-level.	
D2-REP2037-72	<ul style="list-style-type: none"> Whilst there is widespread agreement of the benefits of collaborative monitoring across sector groups, a framework is required to facilitate strategic monitoring programmes at the government level. Facilitating strategic monitoring is a key objective of Natural England's Approach to Offshore Wind (Natural England, 2021) and Natural England supports the implementation of strategic monitoring as a mechanism to address key evidence gaps and to deliver monitoring projects at scale. Natural England are also leading the Planning Offshore Wind Strategic Environmental Impact Decisions (POSEIDON) project. This is a multi-year project, funded through the Crown Estate's Offshore Wind Evidence and Change (OWEC) programme, which is seeking to address strategic data collection for offshore wind projects. The outputs of the POSEIDON project will be incorporated into this advice when available. Projects should consider whether data collection for some aspects of post-consent monitoring could be undertaken collaboratively with other regional projects in order to answer specific monitoring aims and priorities. Natural England strongly supports the implementation of collaborative monitoring programmes across projects, zones or regions, and can provide advice on a case-by-case basis. 	

Table 2.5 The Applicant's response to Natural England's Annex 1 table ("Natural England's Response to the Applicant's Documents Submitted at Deadline 1 Relevant to our Remit")

ID	PINS Document Reference	Document Name	Natural England's response/Position to Summary	Applicant's Response
Marine Mammals				
D2-REP2037-73	REP1-083	9.25 Marine Mammals Technical Note 1_EIA	Natural England has provided an update in our Risks and Issues log in relation to these documents.	The Applicant notes the responses and has further met with Natural England to seek discussion on matters where there is no change, noting that the technical notes are submitted at Deadline 3 in respect of NRW comments and do include inter-related comments that are also expected to advance resolution with NE.
D2-REP2037-74	REP1-084	9.26 Marine Mammals Technical Note 2_HRA	Please refer to Section 2 of this cover letter.	
Offshore Ornithology				
D2-REP2037-75	REP1-080	9.22 Offshore Ornithology Technical Note 1_EIA	Natural England's response to this/these document(s) is provided in Appendix B4. Our advice on the updated Cumulative Effects Assessment (CEA) including gap-filled projects will follow at Deadline 3.	Noted – see detailed responses above (ID D2-REP2037-08 to D2-REP2037-14). The Applicant confirms that it will provide a further response to any comments received from NE at Deadline 3, as appropriate.
D2-REP2037-76	REP1-081	9.23 Offshore Ornithology Technical Note 2_HRA	Natural England's response to this/these document(s) is provided in Appendix B5. Our advice on the updated in-combination assessment including gap-filled projects will follow at Deadline 3.	Noted – see detailed responses above (ID D2-REP2037-15 to D2-REP2037-21). The Applicant confirms that it will provide a further response to any comments received from NE at Deadline 3, as appropriate.
D2-REP2037-77	REP1-082	9.24 Offshore Ornithology Technical Note 3_RTD at Liverpool Bay SPA Update Assessment	Natural England's response to this/these document(s) is provided in Appendix B6.	Noted – see detailed responses above (ID D2-REP2037-22 to D2-REP2037-31). The Applicant confirms that it will provide a further response to any comments received from NE at Deadline 3, as appropriate.

ID	PINS Document Reference	Document Name	Natural England's response/Position to Summary	Applicant's Response
D2-REP2037-78	REP1-093	9.30 Update on Without Prejudice Compensatory Measures	Natural England's response to this/these document(s) is provided in Appendix B7.	Noted – see detailed responses above (ID D2-REP2037-32 to D2-REP2037-39).
General				
D2-REP2037-79	REP1-079	9.21 Outstanding Information from the Applicant in Response to the Rule 9 Letter	Natural England has no comments to make on this document as it only signposts other documents submitted at D1 and PDA.	The Applicant notes this response.
Various Topics				
D2-REP2037-80	REP1-013	4.9.1 Report to Inform Appropriate Assessment_Rev02_Tracked	These documents have received minor updates only, that do not address any issues with red or amber RAG ratings. Natural England therefore has no comments to make.	The Applicant notes this response.
D2-REP2037-81	REP1-015	4.11.1 Habitats Regulations Assessment Without Prejudice Derogation Case_Rev 02_Tracked		
D2-REP2037-82	REP1-025	5.1.7.1 Chapter 7 Marine Geology, Oceanography and Physical Processes_Rev 02_Tracked		
D2-REP2037-83	REP1-031	5.1.11.1 Chapter 11 Marine Mammals_Rev 02_Tracked		
D2-REP2037-84	REP1-033	5.1.12.1 Chapter 12 Offshore Ornithology_Rev 02_Tracked		
D2-REP2037-85	REP1-045	5.2.11.2.1 Appendix 11.2 Marine Mammal Information		

ID	PINS Document Reference	Document Name	Natural England's response/Position to Summary	Applicant's Response
		and Survey Data_Rev 03_Tracked		
D2-REP2037-86	REP1-047	5.2.11.3.1 Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment_Rev 02_Tracked		
D2-REP2037-87	REP1-049	5.2.11.4.1 Appendix 11.4 Marine Mammal CEA Project Screening_Rev 02_Tracked		
D2-REP2037-88	REP1-055	6.2.1 Outline Project Environmental Management Plan_Rev 02_Tracked		
D2-REP2037-89	REP1-057	6.8.1 Outline Scour Protection and Cable Protection Plan_Rev 02_Tracked		

2.4 NatureScot (REP2-039)

Table 2.6 The Applicant's comments on the NatureScot's Deadline 2 submission (REP2-039)

ID	Deadline 2 submission	Applicant comment
D2-REP2-039-01	Planning Inspectorate – We previously offered comments on the proposed Morecambe Offshore Wind Farm directly to the applicant. We now offer these comments directly to you for consideration in the Examination process.	The Applicant notes this response.
D2-REP2-039-02	We do emphasise that, due to high levels of casework demand relating to marine energy proposals in Scottish seas, we are unable to commit to formal engagement in the DCO consenting process.	The Applicant notes this response.
D2-REP2-039-03	However, we note that this project is undergoing Examination, and that the Report on the Implications for European Sites (RIES) is to be considered on 25 March 2025. We note the assessment of impacts set out in the Report to Inform Appropriate Assessment (RIAA) and supporting documents, which includes an assessment of impacts upon Scottish designated sites.	The Applicant notes this response.
D2-REP2-039-04	We have reviewed the RIAA and recorded the predicted impacts on Scottish sites. We do this to inform our own future in-combination assessment of predicted and actual impacts on Scottish designated sites. We provide a summary of our own review here, which we hope is of assistance. Note that our review focusses solely on marine ornithological receptors.	The Applicant notes this response.
NatureScot review – approach to assessment		
D2-REP2-039-05	Marine energy proposals in Scottish waters are expected to follow the approaches set out in NatureScot's suite of 11 Marine Ornithological Impact Assessment guidance notes, which are available here: https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/renewable-energy/marinerenewables/advice-marine-renewables-development	The Applicant is aware that NatureScot's advice on ornithological assessment for offshore wind development can differ from the advice provided by Natural England and the other Statutory Nature Conservation Bodies (SNCBs). However, as the Project is located within an area under English jurisdiction, the assessment has been presented in accordance with Natural England guidelines. It is noted that Natural England has not raised any concerns regarding the general approach to the assessment within its representations to the Examination

ID	Deadline 2 submission	Applicant comment
		Authority (ExA), which reflects the adherence to this guidance. The Applicant does not consider it necessary or appropriate to present an assessment using differing approaches, and notes that it is not aware of other projects where such an approach has been adopted. It is also important that a consistent approach is applied across the assessment, to enable the ExA and Secretary of State to interrogate the assessment and reach consistent conclusions. The Applicant maintains that the assessments as presented in Environmental Statement (ES) Chapter 12 Offshore Ornithology (REP1-032), the Report to Inform Appropriate Assessment (RIAA) (REP1-012) and respective update notes (REP1-080, REP1-081 and REP1-082) are robust and provide suitable and sufficient information for the ExA to advise the Secretary of State on the potential effects of the Project.
D2-REP2-039-06	<p>The approach used in the Morecambe assessment follows non-Scottish guidance and assessment methodologies, and therefore differs in key ways from the Scottish approach:</p> <ul style="list-style-type: none"> The applicant has screened species using the maximum foraging range. NatureScot recommends the mean max + 1SD to be used to screen in connectivity in most cases. 	The Applicant can confirm that mean maximum +1SD has been used in the Habitat Regulation Assessment (HRA) screening to determine breeding season connectivity with Special Protection Areas (SPAs) (refer to Section 8.4 of the Habitats Regulations Assessment Screening Report (APP-028). This is in line with Natural England guidance (Parker <i>et al.</i> , 2022).
D2-REP2-039-07	<ul style="list-style-type: none"> Distances between the development site and the SPAs are given 'as the crow flies'; we recommend by-sea distances to reflect biological realism, and where there is clear well-evidenced segregation of foraging behaviour based on tracking data, if appropriate. 	The Applicant used distance 'as the crow flies' in the initial HRA screening (APP-028) as this approach is more precautionary. However, where appropriate, across-sea distances have been used when presenting the detailed assessment in the RIAA (REP1-012), and these distances have also been used for the apportioning calculations for breeding season effects on applicable species.
D2-REP2-039-08	<ul style="list-style-type: none"> In Scotland, we are recommending screening for distributional responses for fulmar. Although this species have not previously been assessed in projects due to being a lower risk for both collision and displacement, they have now started to be included 	Noted. As NatureScot states, fulmar are considered to have low vulnerability to both collision and displacement effects, and are not generally assessed for English projects. The Applicant considers that this approach remains appropriate, and that no additional assessment

ID	Deadline 2 submission	Applicant comment
	in some assessments particularly due to proximity to breeding colonies and concerns with barrier effects.	for this species is required, noting that this species was, in any case, recorded infrequently and in low densities during baseline surveys for the Project. It is also noted that Natural England has not raised any concerns regarding the assessment in respect of fulmar within its representations to the ExA.
NatureScot review – comments on the documentation		
D2-REP2-039-09	<ul style="list-style-type: none"> The screening process seems inconsistent. For example, red-throated divers have been screened from Northern Isles SPAs but not for Rum SPA which is much closer to the development site, and the species is more likely to overlap with the development site in the non-breeding season (Furness, 2015). 	<p>As set out in Section 8.4.1 of the HRA screening (APP-028), screening of non-breeding season connectivity has been undertaken where the SPA population contributes to more than 1% of the relevant Biologically Defined Minimum Population Scales (BDMPS) population, as defined by Furness (2015). The Applicant has identified there is an error for red-throated diver in the screening Table 8.5 in the HRA screening (APP-028), which has used the incorrect SPA contribution to the BDMPS totals for the calculation. This has resulted in an overestimation of the proportion of birds from each SPA likely to be present at the Project site. The corrected values are presented in the updated HRA Screening Report submitted at Deadline 3 (Habitats Regulations Assessment Screening Report_Rev 02 Clean (Document Reference 4.10)); this confirms that for all SPAs where breeding red-throated diver is a qualifying feature (Foula SPA, Hermaness, Saxa Vord and Valla Field SPA, Hoy SPA, Ronas Hill, North Roe SPA and Rum SPA), the contribution for each SPA is below the 1% threshold, and therefore all sites are screened out from the requirement for appropriate assessment (i.e. there would be no likely significant effect). Notwithstanding this error, the conclusions in respect of breeding red-throated diver for all SPAs presented in the RIAA (REP1-012) would not be affected, i.e. there would be no risk of adverse effect on site integrity (AEoSI) for all SPAs designated for breeding red-throated diver.</p>

ID	Deadline 2 submission	Applicant comment
D2-REP2-039-10	<ul style="list-style-type: none"> There were quite a few cases where typos occurred in the text. For example, paragraphs on razorbills containing sentences on guillemots. 	The Applicant has not been able to identify the typos that NatureScot is referring to, although it is noted that guillemot is referred to in some assessment text in relation to razorbill, given that there are some ecological similarities between the two species. However, even if such errors are present, these would not affect any assessment conclusions.
NatureScot review – site-specific comments		
D2-REP2-039-11	<p>Solway Firth SPA</p> <p>We no longer support the use of SOSS-MAT (Wright <i>et al.</i>, 2012) for migratory bird screening. Instead we recommend the recently published Offshore wind strategic review (2023) should be used for assessment of migratory waterbirds and WWT & MacArthur Green (2014) report should be used for seabirds. This is because the 2014 report used the Wright <i>et al.</i> 2012 report as “The starting point for defining the migration corridors of non-seabird species was the figures provided in the SOSS-05 report. These have been refined where possible and modified to reflect passage through Scottish waters.”</p>	The use of the SOSS-MAT tool for the migratory bird assessment has been agreed by Natural England, which has confirmed that the Project alone would not result in ‘any significant level of impact to migratory birds that are qualifying features of SPA/Ramsar sites within 100km of the Project’. Given the very low predicted mortality (zero or close to zero) for all species from the Solway Firth SPA predicted by the SOSS-MAT tool (Section 8.16 of the RIAA (REP1-012)), the Applicant can confirm that the use of NatureScot’s preferred tool would make no difference to the conclusions to the assessment (i.e. that there would be no AEoSI). The Applicant also highlights that the Wildfowl and Wetlands Trust (WWT) & MacArthur Green (2014) report has been used for the assessment of potential collision risk to migratory seabirds, as presented in Section 12.6.3.2 of ES Chapter 12 Offshore Ornithology (REP1-032). Accordingly, the Applicant considers that the assessments presented are robust and provide suitable and sufficient information for the ExA to advise the Secretary of State on the potential effects of the Project.

ID	Deadline 2 submission	Applicant comment
D2-REP2-039-12	<p>Ailsa Craig SPA</p> <p>Gannet</p> <p>The applicant states that based on GPS tracking data (Wakefield <i>et al.</i>, 2013) the proposed development overlaps with Ailsa Craig SPA gannets, and as gannets from different colonies do not overlap foraging ranges during the breeding season, it is assumed all breeding adults present originate from Ailsa Craig SPA.</p>	<p>The Applicant considers that a robust and precautionary assessment of potential effects on gannet from Ailsa Craig SPA has been presented within the RIAA (REP1-012).</p> <p>As set out in earlier responses, the Applicant has used a 1% increase in background mortality as the threshold above which an adverse effect would be possible, and therefore Population Viability Analysis (PVA) would be required. This is in accordance with the approach advocated by Natural England. It is noted that even using NatureScot's preferred mortality rate of 3% for displaced birds and discounting 70% macro-avoidance for collision risk, the predicted increase in background mortality would be approximately 0.2%, and therefore well below the threshold where an adverse effect would be possible.</p> <p>For information, the Applicant has also re-estimated the percentage point change, based on NatureScot's worst case estimate of 13 birds and an SPA population of 66,452 birds (see Table 8.54 of the RIAA (REP1-012)). The Applicant calculates that this would be an annual increase in mortality of 0.019 percentage points, which is below the threshold that NatureScot recommends that PVA is required. The Applicant has not been able to replicate NatureScot's estimate of 0.24 percentage point change, and it is unclear how this has been derived.</p> <p>NatureScot's comment in relation to the application of the 70% macro-avoidance is noted. However, as set out above, while the Applicant considers that application of macro-avoidance is appropriate (and advocated by Natural England), it makes no difference to the conclusions of the assessment, given the low numbers of gannets recorded at the Project site. The Applicant also highlights that it is not logical to assume a displacement effect on gannets, but then not to take this effect into account when considering collision risk, as this effectively double-counts the effects.</p>
D2-REP2-039-13	<p>Although the applicant has used a displacement value of 60-80% with 1% mortality, NatureScot recommends a displacement value of 70% with a mortality value of 1%-3%. Based on numbers presented in Table 8.54, the annual mortality range of Ailsa Craig SPA gannets would be 1-13 birds per annum. Using the maximum potential mortality value, there would be an annual increase in mortality of 0.24 percentage points and we would recommend a PVA. We recommend a species is taken forward for PVA when assessed effects exceed a change to the adult annual survival rate of 0.02 percentage point change. NatureScot, like RSPB, does not accept the 70% macro-avoidance rate for gannet in the breeding season and therefore we would view the additional mortality from collision to be higher than reported.</p>	

ID	Deadline 2 submission	Applicant comment
D2-REP2-039-14	As a result, including the increase in mortality from collision, we would be unable to conclude no AEoSI from the project alone . However, we note that not all gannetries were included in the tracking studies. Of particular relevance are Scar Rocks and Ireland's Eye. As these sites were not included in the tracking study, we cannot disregard these sites and therefore cannot discount that some of the gannets seen in the study area would have originated from these colonies. As such, we cannot agree that 100% of the gannets present in the DAS surveys in the breeding season originated from Ailsa Craig SPA and would require a recount of apportioning this species.	The Applicant considers that the information provided within the RIAA (REP1-012) provides the ExA with sufficient robust information to enable it to advise the Secretary of State that there would be no risk of an adverse effect on integrity on Ailsa Craig SPA. Furthermore, as NatureScot has indicated, the Applicant has adopted a precautionary approach to apportioning of effects to this SPA during the breeding season, by assuming that all adult birds present originate from Ailsa Craig. This provides further confidence that the conclusions of the assessment are robust.
D2-REP2-039-15	Kittiwake A mortality increase of 0.02% annually would trigger a PVA in Scotland, however, as this is not a Scottish development we accept the Natural England threshold of 1% increase in baseline mortality has been used in this assessment. It is noted that kittiwake are not assessed for displacement. According to NatureScot Guidance Note 8, kittiwake should have a displacement rate of 30%, with a mortality rate of between 1% and 3%. For our own records, we would like to understand the effects of the project on birds from Scottish SPAs and therefore would appreciate any further information that could be provided on displacement mortality.	Noted, the Applicant welcomes confirmation that NatureScot accepts the threshold of 1% increase in background mortality that has been applied for the Project. As NatureScot indicates, consideration of displacement effects on kittiwake is not required by Natural England, and this information has not, therefore, been presented to the Examination. The Applicant would be happy to provide the relevant data directly to NatureScot for their information.
D2-REP2-039-16	Lesser Back Backed Gull - We Agree no Adverse Effects on Site Integrity (AEoSI) Herring gull - Agree no AEoSI Guillemot - Agree no AEoSI	The Applicant welcomes this response.
D2-REP2-039-17	Forth Islands SPA Gannet -Agree no AEoSI Puffin - Agree no AEoSI	
D2-REP2-039-18	North Colonsay and Western Cliffs SPA Kittiwake - Agree no AEoSI Guillemot - Agree no AEoSI	

ID	Deadline 2 submission	Applicant comment
D2-REP2-039-19	Treshnish Isles SPA European storm petrel - Agree no AEoSI	
D2-REP2-039-20	Fowlsheugh SPA Fulmar - Agree no AEoSI Kittwake - Agree no AEoSI	
D2-REP2-039-21	Rum SPA Manx shearwater We agree there is no AEoSI for Manx shearwater at Rum SPA. The assessment does not seem to take account of the recent review on the risk of collision and displacement in procellariiforms and we draw attention to this. These species are active nocturnally, and there is evidence to suggest they are sensitive to light attraction ("phototaxis"), which could render them especially vulnerable to negative impacts from offshore windfarms, for example, if attracted to the rotor-swept area by lights on the turbines that are required for aviation purposes. Low fecundity rates and a relatively protracted time to reach maturity (3–6 years) for these species, means seemingly small impacts on survival rates can have large impacts on population viability, making them particularly vulnerable to lethal impacts of wind farm development. The combination of large foraging ranges and very protracted breeding seasons means that birds will be exposed to risks from marine activities over a wider geographic area, and for a longer period of the year, than many other seabird species.	Noted, the Applicant welcomes confirmation from NatureScot that there would be no AEoSI for this feature. It is noted that the Applicant has reviewed the potential effects of lighting on Manx shearwater in Section 12.6.3.1 of ES Chapter 12 Offshore Ornithology (REP1-032), and cross-referenced this review in the assessment for Rum SPA in the RIAA (REP1-012). The Applicant has concluded 'that that lighting associated with the Project is very unlikely to significantly affect disturbance and displacement effects on Manx shearwater, and therefore the conclusions of the assessment are unchanged'. The Applicant also highlights its detailed responses to Royal Society for the Protection of Birds (RSPB's) relevant representations in respect of Manx shearwater (ID RR-073-12 and ID RR073-13 in PD1-011).
D2-REP2-039-22	Canna and Sanday SPA Guillemot - Agree no AEoSI	The Applicant welcomes this response.
D2-REP2-039-23	Buchan Ness to Collieston Coast SPA Fulmar- Agree no AEoSI Kittiwake - Agree no AEoSI	
D2-REP2-039-24	Mingulay and Berneray SPA Fulmar - Agree no AEoSI	

ID	Deadline 2 submission	Applicant comment
	Guillemot - Agree no AEoSI Razorbill - Agree no AEoSI	
D2-REP2-039-25	Troup, Pennan and Lion's Head SPA Fulmar - Agree no AEoSI Kittiwake - Agree no AEoSI	
D2-REP2-039-26	East Caithness Cliffs SPA Fulmar - Agree no AEoSI Kittiwake - Agree no AEoSI	
D2-REP2-039-27	Shiant Isles SPA Fulmar - Agree no AEoSI Guillemot - Agree no AEoSI Razorbill - Agree no AEoSI Puffin - Agree no AEoSI	
D2-REP2-039-28	Handa SPA Fulmar - Agree no AEoSI Great Skua - Agree no AEoSI Kittiwake - Agree no AEoSI Guillemot - Agree no AEoSI Razorbill - Agree no AEoSI	
D2-REP2-039-29	North Caithness Cliffs SPA Fulmar - Agree no AEoSI Kittiwake - Agree no AEoSI	
D2-REP2-039-30	St Kilda SPA Fulmar - Agree no AEoSI Manx shearwater - Agree no AEoSI Leach's storm petrel - Agree no AEoSI Great skua - Agree no AEoSI Guillemot - Agree no AEoSI	

ID	Deadline 2 submission	Applicant comment
	Puffin - Agree no AEoSI Gannet - Agree no AEoSI	
D2-REP2-039-31	Cape Wrath SPA Fulmar - Agree no AEoSI Kittiwake - Agree no AEoSI Guilemot - Agree no AEoSI Razorbill - Agree no AEoSI	
D2-REP2-039-32	Flannan Isles SPA Fulmar - Agree no AEoSI Leach's storm petrel - Agree no AEoSI Gillemot - Agree no AEoSI Puffin - Agree no AEoSI	
D2-REP2-039-33	Hoy SPA Red-throated diver - Agree no AEoSI Fulmar - Agree no AEoSI Great skua - Agree no AEoSI	
D2-REP2-039-34	Copinsay SPA Fulmar - Agree no AEoSI	
D2-REP2-039-35	Sule Skerry and Sule Stack SPA Leach's storm petrel - Agree no AEoSI Gannet - Agree no AEoSI Guillemot - Agree no AEoSI Puffin - Agree no AEoSI	
D2-REP2-039-36	Rousay SPA Fulmar - Agree no AEoSI	
D2-REP2-039-37	North Rona and Sula Sgeir SPA Fulmar - Agree no AEoSI Leach's storm petrel - Agree no AEoSI	

ID	Deadline 2 submission	Applicant comment
	Gannet - Agree no AEoSI Guillemot - Agree no AEoSI	
D2-REP2-039-38	Calf of Eday SPA Fulmar - Agree no AEoSI	
D2-REP2-039-39	West Westray SPA Fulmar - Agree no AEoSI Kittiwake - Agree no AEoSI	
D2-REP2-039-40	Fair Isle SPA Fulmar - Agree no AEoSI Great skua - Agree no AEoSI	
D2-REP2-039-41	Sumburgh Head SPA Fulmar - Agree no AEoSI	
D2-REP2-039-42	Foula SPA Fulmar - Agree no AEoSI Great skua - Agree no AEoSI Red-throated diver - Agree no AEoSI Puffin - Agree no AEoSI	
D2-REP2-039-43	Noss SPA Fulmar - Agree no AEoSI Great skua - Agree no AEoSI Gannet - Agree no AEoSI	
D2-REP2-039-44	Rona's Hill – North Roe and Tingon SPA and Ramsar Red-throated diver - Agree no AEoSI Great skua - Agree no AEoSI	
D2-REP2-039-45	Fetlar SPA Fulmar - Agree no AEoSI Great skua - Agree no AEoSI	

ID	Deadline 2 submission	Applicant comment
D2-REP2-039-46	Hermaness, Saxa Vord and Valla Field SPA Fulmar - Agree no AEoSI Great skua - Agree no AEoSI Gannet - Agree no AEoSI Red-throated diver - Agree no AEoSI Puffin - Agree no AEoSI	

2.5 Ørsted (REP2-040)

Table 2.7 The Applicant's comments on Ørsted's Deadline 2 submission (REP2-040)

ID	Relevant Representation	Applicant comment
REP2-040-01	<p>1. Introduction</p> <p>This submission is provided in accordance with Deadline 2 of the examination timetable for the application by Morecambe Offshore Windfarm Limited (the "Applicant") for an Order under the Planning Act 2008 (the "Act") granting Development Consent for the Morecambe Offshore Windfarm Generation Assets (the "Project").</p> <p>We represent six owners of operational offshore windfarms in the East Irish Sea (as set out relevant representations RR-008, RR-014, RR-056, RR-088, RR-089, RR-093), who we refer to together as the "Ørsted IPs" for the purposes of this submission</p> <p>This submission responds to the Crown Estate's Leasing Round 4 Information Memorandum (the "TCE Memorandum") [REP1-091] and the Frazer-Nash study [REP1-089] submitted by the Applicant at examination deadline 1.</p> <p>These documents are relied upon by the Applicant as providing support for its position that an assessment of the wake effects of the Project on the Ørsted IPs' developments is not required.</p> <p>Alongside this submission, the Ørsted IPs have submitted a report by consultants Wood Thilsted, which assesses the wake effects of the Project. This report has recently been finalised, and is the basis for the figures referred to in the Ørsted IPs' deadline 1 submission [REP1-103].</p>	<p>The Applicant has reviewed the submission of Ørsted IPs' Wake Impact Assessment Report (REP2-041). The Applicant also notes this document has also been submitted by the Ørsted IPs to the Mona Offshore Wind Project Examination (REP5-120) and Morgan Offshore Wind Project Examination (REP4-049).</p> <p>In respect of the Wood Thilsted (WT) report issued by the Ørsted IPs (REP2-041), the Applicant notes that the identified total additional wake loss on all Ørsted IPs' Irish Sea assets is 0.68% from the Morecambe project alone. The identified individual wake loss from the Morecambe project ranges from 0.32% to 1.37%.</p> <p>These figures are based on a 'baseline' scenario proposed by the Ørsted IPs of 32 Wind Turbine Generators (WTGs) with a 236m rotor diameter and a hub height of 150m. A further scenario is proposed comprising fewer, larger turbines (22 WTG) with a 276m rotor diameter and a hub height of 170m. This further scenario would result in improved wake loss effects on all Ørsted IPs' assets ranging from 0.01% to 0.16% improvements.</p> <p>Detailed design has not yet taken place and, accordingly, these scenarios are unlikely to reflect the final layout and parameters of the consented Project. Specifically, the Applicant would note that the baseline proposed in the WT report does not correspond to the "Smaller WTGs" design envelope set out in Chapter 5 Project Description (REP1-022 at Table 5.2, pg. 27). The WT Report does acknowledge (section 2.2.2. at pgs. 14-15) that its conclusions are preliminary and based on a precautionary approach, which is likely to change based on layout: "Due to the preliminary nature of the future wind farms, WT did</p>

ID	Relevant Representation	Applicant comment
		<p>not consider additional constraints including foundation type or seabed properties such as depth and slope. WT would expect that micro-siting or additional layout considerations would ultimately alter the results, however these are likely to be small compared to the changes due to turbine selection". The Applicant would note that, where the purported impacts are small to begin with, small changes due to layout could fundamentally improve those impacts.</p> <p>As set out in Comment ID WR-112-04 within the Applicant's Comments on Written Representations (REP2-027), the Applicant notes that NPS EN-3 states that a "pragmatic approach should be employed by the Secretary of State" where a proposed development "affects other infrastructure or activity" (para. 2.8.342). Additionally, paragraph 2.8.347 of NPS EN-3 states that: "Where a proposed development is likely to affect the future viability or safety of an existing or approved/licensed offshore infrastructure or activity, the Secretary of State should give these adverse effects substantial weight in its decision-making" (emphasis added).</p> <p>NPS EN-3 is clear that it is impacts that may affect future viability or safety of existing infrastructure that should be afforded substantial weight should be given in reaching a decision.</p> <p>It is noted that, in the Awel y Mor precedent referred to by the Ørsted IPs, wake loss effects of 2% on the Rhyl Flats Wind Farm at a distance of 5.1km away were considered to not impact the viability of that development by the Examining Authority, which was supported by the Secretary of State: "with regard to paragraph 2.6.185 of NPS EN-3, the ExA does not consider that the 2% effect would affect the future viability of Rhyl Flats Wind Farm and that when balancing the 2% figure against the energy benefits of the Proposed Development this provides moderate weight against the scheme" (para. 5.14.80. at page 289 of the</p>

ID	Relevant Representation	Applicant comment
		<p>Examining Authority's Report of Findings in respect of Awel y Môr Offshore Wind Farm Ref. EN010112, 2023).</p> <p>The Ørsted IPs have not demonstrated that the purported wake losses caused by the Morecambe Project would impact the future viability of its assets. The worst-case losses suggested range from 0.32% to 1.37% (noting that this is based on a baseline scenario which is highly precautionary and likely subject to a margin of error) with the total additional wake loss on all Ørsted IPs' Irish Sea assets at 0.68%. This aligns with the finding of the ExA and Secretary of State decision in respect of Awel y Môr, where a 2% wake loss effect (i.e. greater wake effect than those identified for any wind farm in this situation) on a closer wind farm would not affect future viability, and so did not attract substantial weight in the decision.</p> <p>The Applicant considers, therefore, that in light of the finding of the Secretary of State in respect of Awel y Môr, any purported wake loss effects on the Ørsted IPs' assets do not affect the viability of those assets such that the impacts should not be given substantial weight. Rather, the Secretary of State must instead employ a 'pragmatic approach' as set out in NPS EN-3 para. 2.8.342.</p>
REP2-040-02	<p>2. Response to the TCE Memorandum</p> <p>The Applicant considers that because the Project complies with the 7.5km buffer distance established by the Crown Estate ("TCE") for the purposes of the round 4 leasing process, no assessment of wake effects is required beyond that distance.</p> <p>The TCE Memorandum provided by the Applicant does not demonstrate that TCE intended for the 7.5km boundary to be relied upon to address potential wake effects between developments.</p> <p>In respect of the 7.5km boundary, the TCE Memorandum states that:¹</p> <p><i>Projects may not be located within 7.5 km of an existing offshore wind farm (meaning a wind farm at any stage of development which has been awarded an agreement for lease or lease from The Crown Estate) unless the owner of the existing offshore wind farm has given its written consent.</i></p>	<p>The Applicant notes that the Examination Authority (ExA) have directed a written question (100I6) to the Crown Estate in relation to this matter as part of ExA's Written Questions 1 (PD-011).</p> <p>The Applicant notes further that the UK Government issued a policy paper on 13 December 2024 entitled "Clean Power 2030 Action Plan: A new era of clean electricity" which includes a case study relating to wake effects. This policy paper notes that the Clean Power 2030 Unit will set up a working group to gather expert opinions from stakeholders, including The Crown Estate, on wake effects: "The Clean Power 2030 Unit would look to convene expert opinions from planners, engineers, academics, project delivery, data scientists and policy to understand the levers we can pull in</p>

ID	Relevant Representation	Applicant comment
	<p>There is no explanation of the basis on which the 7.5km separation distance was developed.</p>	<p>this space, working with stakeholders like The Crown Estate, Crown Estate Scotland, the Planning Inspectorate, ORE Catapult and industry to gather the data and build an evidence base, looking for comparison mitigations with international partners and other industries” (pg. 84).</p>
<p>REP2-040-03</p>	<p>While the TCE Memorandum notes that it has undertaken consultation and technical analysis in developing the seabed leasing areas, it states that:²</p> <p><i>To assist Bidders in their choice of sites, we are making our characterisation analysis for each of these four Bidding Areas available to the market. Bidders will need to undertake their own analysis and assessments to determine the best location for their project proposals.</i></p> <p>The TCE Memorandum also acknowledges that consents will be required for the developments, and that decisions will be made in accordance with the NPS-EN3:³</p> <p><i>Applications for DCOs are decided in accordance with National Policy Statements (NPSs), which, after a process of public consultation and parliamentary scrutiny, are formally designated by Government. For offshore wind farms, the most relevant of these are the Overarching National Policy Statement for Energy (EN-1) and the National Policy Statement for Renewable Energy Infrastructure (EN-3).</i></p> <p>In light of above, we consider the TCE Memorandum offers no support for the Applicant’s position that compliance with the buffer distance meets the policy requirements of the NPS-EN3, in respect of wake loss. Rather, the TCE Memorandum indicates this buffer distance provides a generic, minimum separation distance between windfarms.</p> <p>This is further reinforced by TCE’s response to questions of the examining authority in relation to the examination for the Outer Dowsing Offshore Wind Farm (Generating Station) regarding the 7.5km distance between Round 4 projects and the Frazer-Nash report (“ODOW Response”).⁴ This response is appended to this submission at Appendix 1. In the ODOW Response, TCE state that the initial buffer was:</p> <p><i>...a separation distance to enable developers to develop, operate and maintain wind farms by allowing for a range of factors including amongst other matters, wake effects, navigation, and safety.</i></p>	<p>The Applicant has previously outlined in a detailed response that the Project complies with the requirements of NPS-EN3 and does not repeat its position here. Refer to Comment ID WR-112-04 within the Applicant’s Comments on Written Representations (REP2-027).</p> <p>As part of the working group referenced in ID REP2-040-02 above, the Applicant expects that stakeholders like The Crown Estate (TCE) will be asked to opine on the existing safeguards for wake effects, including boundaries between projects that have been established. The Applicant notes that TCE’s response to the Outer Dowsing examination pre-dates the UK Government’s announcement regarding proposals to establish an industry-wide task force on wake loss.</p>

ID	Relevant Representation	Applicant comment
REP2-040-04	<p>TCE goes on to state that the initial buffer was used <i>“for the purpose of processing project proposals in the tender only...”</i> and notes that the location of a wind farm within the leased area is a matter for the developers to decide and design for.</p> <p>TCE concluded that compliance with the initial boundary does not replace the need for further evaluation in the formulation of a project:</p> <p><i>The location of a wind farm within an area of seabed leased from The Crown Estate is for developers to decide and design for, subject to obtaining the necessary consents and The Crown Estate’s approval.</i></p> <p>TCE also acknowledged that inter-farm wake effects could extend beyond the buffer distances and that factors beyond distance, including prevailing wind direction and wind farm layout, may also be relevant to assessing wake effect.</p> <p>TCE’s ODOW Response indicates that the leasing round buffer distance sets a minimum distance between developments. Development within a leased area must necessarily be refined during project development, depending on the specific features of the site and potential effects of the development.</p> <p>TCE’s explanation does not support the approach that the Applicant has taken to wake loss during this examination.</p>	<p>The Applicant does not consider TCE’s ODOW Response to contradict the Applicant’s position. The ODOW Response clearly establishes that wake effects were one factor (out of many) for establishing an initial separation distance between projects to allow development. In full, the first bullet point states:</p> <p><i>“The buffer/stand-off between wind farms (unless developers consent to closer proximity) is a separation distance to enable developers to develop, operate and maintain wind farms by allowing for a range of factors including amongst other matters, wake effects, navigation, and safety.”</i></p> <p>In later bullets the TCE’s ODOW response describes the buffer zone as <i>“mitigation”</i> and <i>“assurance to participants through limiting proximity”</i></p> <p>The Applicant accepts, as do TCE in the ODOW Response, that wake effects can extend beyond 7.5km. However, as noted in the ODOW Response, it is the National Policy Statements (and not TCE’s position) that are relevant for determining an application. NPS EN-3 does not require an assessment just because there may be an impact. Paragraph 2.8.197 establishes a two-step process by which only ‘close’ existing infrastructure must be assessed. Given that impacts like wake diminish with distance, the Applicant considers that TCE’s decision to set a buffer distance at 7.5km is helpful in determining what might be reasonably considered close enough to give rise to such impacts at a level where assessment would be proportionate. As the holder of the seabed or rights for all offshore wind developments in England, the Applicant does not agree with the Ørsted IPs that the buffer distance selected by TCE as appropriate to mitigate impacts (including wake) is irrelevant in interpreting what might be</p>

ID	Relevant Representation	Applicant comment
		considered close enough to warrant the next step of a wake assessment (not a straightforward process) in the context of the NPS policy.
REP2-040-05	<p>3. Response to Frazer-Nash study</p> <p>The Applicant relies on this report to support its position that an assessment of the wake effects of the Project is not required.</p> <p>As outlined in the Orsted IPs deadline 1 submission [REP1-103], it is noted that the study states that, at separation distances “<i>much larger than 20km</i>” the ratio between external and internal wake effects become vanishingly small (rather than the isolated effect of external wakes becoming vanishingly small “<i>by 20km</i>” as stated by the Applicant).</p> <p>This study takes some generic, theoretical offshore wind farm pairs and looks at the balance in total production based on different densities and separation buffers, in order to inform TCE’s process of optimising the seabed. It cannot be relied on in the consenting process which aims to assess the specific effects on other sea users. It is noted that this study post-dates the TCE’s imposition of a 7.5km separation distance and therefore should not be interpreted as contributing to the rationale for this separation distance.</p> <p>In relation to the Frazer-Nash study, TCE further stated in its ODOW Response that “<i>The report summarises modelling applied to generic/hypothetical wind farms and does not replace the need for project-specific analysis.</i>”</p> <p>TCE’s comments in the ODOW Response are unambiguous in their terms and confirm that the Applicant’s approach is inappropriate.</p>	<p>The Applicant has previously outlined in detailed response that the Frazer-Nash Report has been considered. However, the Applicant’s position is not reliant on the Frazer-Nash report as the Project complies with the requirements of NPS EN-3. In particular, the Applicants maintain that the correct starting point for assessing and understanding wake effects is Paragraph 2.8.197 of NPS EN-3 which requires a further assessment to be carried out only where a proposed offshore development is “close to” existing offshore infrastructure (see comment ID WR-112-04 within the Applicant’s Comments on Written Representations (REP2-027)).</p> <p>Furthermore, the Applicant does not consider that The Crown Estate’s (TCE’s) response to the Outer Dowsing Offshore Wind Farm (Generating Station) Examination can be taken to confirm the Applicant’s approach is inappropriate. The Applicant acknowledges that wake effects can extend beyond 7.5km. However, NPS EN-3 does not require an assessment just because there may be an impact. Paragraph 2.8.197 establishes a two-step process by which only ‘close’ existing infrastructure must be assessed. However, as outlined previously, TCE have taken into account wake effects, amongst other constraints, when setting the 7.5km distance between Round 4 leasing areas and other Offshore Windfarms (OWFs) (unless otherwise agreed). The distance was set to both new and existing operational projects.</p>

2.6 Spirit Energy (REP2-042)

Table 2.8 The Applicant's comments on Spirit Energy's Deadline 2 submission (REP2-042)

ID	Deadline 2 Submission	Applicant comment
REP2-042-01	<p>We are instructed by Spirit Energy (Spirit) in relation to the proposed development consent order application (the Application) made by Morecambe Offshore Windfarm Ltd (the Applicant) for the proposed Morecambe Offshore Windfarm Generation Assets (the Project). 'Spirit Energy' is the trading name used by Spirit Energy Limited and its subsidiaries, including Spirit Energy Production UK Limited, a group which collectively conducts European oil and gas operations.</p> <p>Spirit has reviewed the submissions made by the Applicant at Deadline 1 of the Examination Timetable under the Rule 8 Letter from the Examining Authority dated 30 October 2024 [PD-010]. This letter set out Spirit's position at Deadline 2 including comments on the Deadline 1 submissions.</p>	The Applicant notes this response.
REP2-042-02	<p>Spirit's Position</p> <p>Spirit reserves its position as detailed in its Written Representation [REP1-116].</p>	
REP2-042-03	<p>Statement of Common Ground</p> <p>At the time of this submission, Spirit has provided updates to the Statement of Common Ground which the Applicant is due to submit as a joint statement by the Applicant and Spirit at Deadline 2.</p>	The Applicant did not submit the Statement of Common Ground (SoCG) with Spirit Energy at Deadline 2. The Applicant intends to submit an updated draft SoCG at Deadline 4 following further communication with Spirit Energy.
REP2-042-04	<p>Deadline 1 Submissions</p> <p>At this stage, there are two matters relating to the Deadline 1 submissions that Spirit wishes to bring to the attention of the Examining Authority.</p>	The Applicant notes this response.
REP2-042-05	<p>1. Timeline for Development of the Project</p> <p>Spirit notes that in the Applicant's Response to Actions arising from Preliminary Meeting and Issue Specific Hearing 1 [REP1-086], the Applicant has provided a 'realistic expected scenario' timeline for delivery of the Project at Plate 3.1. This optimistic timeline (relative to the 'delayed scenario'</p>	The Realistic expected scenario presented in Plate 3.1 aligns with the assumptions used in the Environmental Statement (ES) submitted as part of the Development Consent Order (DCO) Application.

ID	Deadline 2 Submission	Applicant comment
	<p>provided at Plate 3.2) indicates that the wind turbines required for the Project will be installed starting Q2 2029.</p> <p>The Applicant had previously indicated that construction of the Project would take place in an earlier period. The updated timeline is now likely to overlap more significantly with activities in respect of Spirit's Morecambe Net Zero project and decommissioning. The Applicant has not consulted Spirit on this change to the Project and consequent impacts.</p>	<p>The Applicant will continue to engage with Spirit Energy in relation to activities relating to the Morecambe Net Zero project and decommissioning.</p> <p>As stated within The Applicant's Response to Spirit Energy Deadline 1 Submissions (REP2-030), the Applicant requires to understand further Spirit Energy's position and its technical requirements in order to develop a refined position.</p>
REP2-042-06	<p>2. IFR Buffer Distance</p> <p>Figure 7.2 "Proposed Buffers from Relevant Representations" enclosed at electronic page 43 of the Response to Actions arising from Preliminary Meeting and Issue Specific Hearing 1 [REP1-086] identifies a 3.3nm buffer around the South Morecambe CPP1. Spirit refers to and reserves its position as set out in paragraphs 2.9-2.22 of its Written Representation [REP1-116], requiring a buffer of at least 3.9nm.</p> <p>Spirit will review and comment on the Deadline 2 submissions in due course and provide its response at Deadline 3.</p>	<p>The Applicant has commented on aviation related concerns within The Applicant's Response to Spirit Energy Deadline 1 Submissions (REP2-030) and the following references to the documents:</p> <ul style="list-style-type: none"> Appendix A: The Applicant's Comments on Spirit Energy and Harbour Energy Aviation Access Study Report (REP2-031) Appendix B: Helicopter Access IMC Corridor (REP2-032) Appendix C: Helicopter Supporting Information Technical Note (Document (REP2-033)

3 References

ExA (2023). AWEL Y MÔR OFFSHORE WIND FARM Examining Authority's Report of Findings and Conclusions and Recommendation to the Secretary of State for Energy Security and Net Zero. Available at: Examining authority's Report of Findings and Conclusions and Recommendation to the Secretary of State for the Department for Energy Security and Net Zero (dated 19 September 2023) [Accessed 05/01/25]

Furness, R. (2015). Non-breeding season populations of seabirds in UK waters: Population sizes for Biologically Defined Minimum Population Scales (BDMPS). Natural England Commissioned Report 164.

Parker, J., Banks, A., Rowson, T., Allen, S., Rowell, H., Harwood, A., Ludgate, C., Humphrey, O., Axelsson, M., Baker, A., Copley, V., (2022). Offshore Wind Marine Environmental Assessments: Best Practice Advice for Evidence and Data Standards: Phase III: Expectations for data analysis and presentation at examination for offshore wind applications (No. Version 1.1).

UK Government (2024). Clean Power 20230 Action Plan: A new era of clean electricity. December 2024. Available at: <https://assets.publishing.service.gov.uk/media/677bc80399c93b7286a396d6/clean-power-2030-action-plan-main-report.pdf> [Accessed 05/01/25]

WWT Consulting and MacArthur Green (2014). Strategic assessment of collision risk of Scottish offshore wind farms to migrating birds. The Scottish Government.