



Morecambe Offshore Windfarm: Generation Assets Development Consent Order Documents

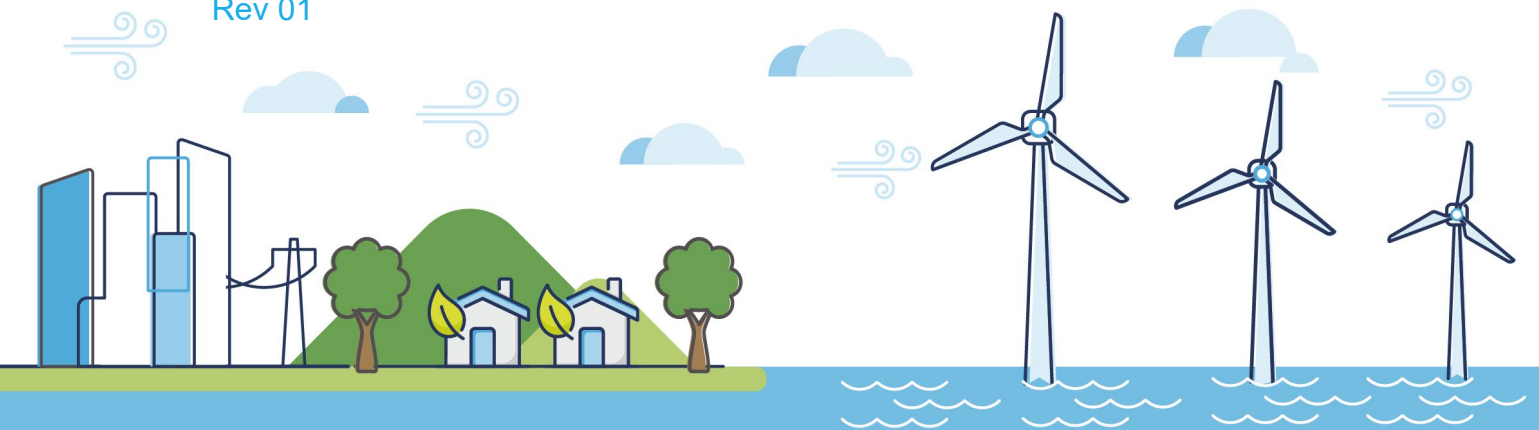
Volume 4

Consultation Report Appendices Part 4 (I)

PINS Document Reference: 4.1.4

APFP Regulation: 5(2)(q)

Rev 01



Document History

Doc No	MOR001-FLO-CON-ENV-RPT-0018	Rev	01
Alt Doc No	n/a		
Document Status	Approved for Use	Doc Date	May 2024
PINS Doc Ref	4.1.4	APFP Ref	5(2)(q)

Rev	Date	Doc Status	Originator	Reviewer	Approver	Modifications
01	May 2024	Approved for Use	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a

Contents

1	Statutory Consultation	5
1.1	Section 42 responses to statutory consultation and Applicant regard	5
2	Statutory Consultation	280
2.1	Section 47 responses to statutory consultation and Applicant regard	280
3	Statutory Consultation	457
3.1	'Limited extension to consultation – 2' feedback and Applicant regard	457



The future of renewable energy

A leading developer in Offshore Wind Projects

1 Statutory Consultation

1.1 Section 42 responses to statutory consultation and Applicant regard

Unique Reference Identifier	Consultation response received	Applicant response
MOR_001_001_190 423	Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)? I am happy to support more generation of power via renewables. My concern is the impact on land where the power cables come ashore. Presumably this will be on the Heysham peninsular. What will the impact be? New sub-station, other infrastructure? How will this affect Heysham residents?	The Applicant notes your response. The Applicant has no further comment to make regarding the onshore elements as this in relation to the Morgan and Morecambe Offshore Wind Farms Transmission Assets Project.
MOR_001_002_200 423	In principle I am happy to support more power generation via renewables. As a Heysham councillor can you please advise me what the impact will be in the Heysham area? Will the generation cable come ashore here, will there be new substations or other infrastructure?	The Applicant notes your response. The Applicant has no further comment to make regarding the onshore elements as this in relation to the Morgan and Morecambe Offshore Wind Farms Transmission Assets Project.
MOR_002_001_240 423	Thank you for consulting JNCC on the Morecambe Offshore Windfarm Generation Assets: Statutory Consultation which we received on 19/04/2023. Natural England is now authorised to exercise the JNCC's functions as a statutory consultee in respect of certain applications for offshore and offshore waters (0-200nm) adjacent to England. Therefore, Natural England should provide a full response. Natural England will contact JNCC directly if any input is requested. As such JNCC have not reviewed this application and will not be providing further comment. Please contact me with any questions regarding the above comments.	The Applicant notes your response.
MOR_003_001_270 423	The Canal and River Trust (the Trust) are the charity who look after and bring back to life 2000 miles of canals & rivers. Our waterways contribute to the health and wellbeing of local communities and economies, creating attractive and connected places to live, work, volunteer and spend leisure time. These historic, natural and cultural assets form part of the strategic and local green-blue infrastructure network, linking urban and rural communities as well as habitats. By caring for our waterways and promoting their use we believe we can improve the wellbeing of our nation. The Trust is a prescribed consultee in the Nationally Significant Infrastructure Projects (NSIPs) process. The trust has reviewed the consultation material in relation to PEIR based on the available Documentation the project seems to solely relate to the offshore element of the works. If this is the case the trust has no further comment to make at this stage.	The Applicant notes your response.
MOR_004_001_270 423	The Isle of Anglesey Public Protection department acknowledges receipt of the Morecambe Offshore Windfarm Generation Assets consultation notification. However, upon reviewing the Documentation via the portal, it would appear that the project's landfall would mainly be around the Morecambe area. Therefore, the Public Protection	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>department would have no comments or observations to make that would be relative to this proposal.</p>	
MOR_005_001_020 523	<p>NATS has concerns regarding the potential impact of the proposal on our radar infrastructure and would welcome the opportunity to work with the developer to better understand this impact as the project design matures.</p>	<p>The Applicant is in engagement with NATS regarding the potential effects to the radar infrastructure. Mitigation has been identified to address these effects, which has been confirmed by NATS. The Applicant and NATS are in the process of implementing the proposed mitigation</p>
MOR_006_001_030 523	<p>I have been forwarded a copy of the advance notification of Statutory Consultation under S.42 of the Planning Act 2008 for the Morecambe Offshore Windfarm Generation Assets.</p> <p>I am part of the consents team supporting our UK operational offshore wind farms. Please could you send future correspondence to my attention.</p>	<p>The Applicant notes your response.</p>
MOR_007_001_040 523	<p>Network Rail comments below:</p> <p>The offshore windfarm itself would not interface with the railway. Potentially there would be an interface in the event that the electricity interconnectors needed to cross the railway via an Under Track Crossing. Early engagement with Network Rail to consider feasibility of the location of a proposed Under Track Crossing would be required.</p>	<p>The Applicant notes your response. The Applicant has no further comment to make regarding the onshore elements as this is in relation to the Morgan and Morecambe Offshore Wind Farms Transmission Assets Project.</p>
MOR_008_001_040 523	<p>Thank you for consulting us on the above.</p> <p>Environment Agency position</p> <p>We have reviewed the Documents provided, in so far as they relate to our remit. We are satisfied that the Generation Assets located in the Irish Sea fall beyond the extent of the remit of the Environment Agency, and we have no comment to make. Yours faithfully</p>	<p>The Applicant notes your response.</p>
MOR_009_001_150 523	<p>HSE's land use planning advice</p> <p>Will the proposed development fall within any of HSE's consultation distances? The redline boundary of the development [ref. Figure 5.1, Morecambe Offshore Windfarm: Generation Assists Preliminary Environmental Information Report (PEIR) - Chapter 5: Project Description Figures] does not fall within the consultation zones of any major accident hazard site with Hazardous Substances Consent (HSC). There are currently no major accident hazard pipelines within the development. If in the intervening period we are notified of a change to this situation, the applicant would need to seek advice from us.</p>	<p>The Applicant notes your response.</p>
MO_009_002_1505 23	<p>Would Hazardous Substances Consent be needed?</p> <p>The presence of hazardous substances on, over or under land at or above set threshold quantities (Controlled Quantities) will probably require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	or when aggregated with others for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 2015 as amended. HSC would be required to store or use any of the Named Hazardous Substances or Categories of Substances at or above the controlled quantities set out in Schedule 1 of these Regulations. Further information on HSC should be sought from the relevant Hazardous Substances Authority.	
MO_009_003_150523	Consideration of risk assessments Regulation 5(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 requires the assessment of significant effects to include, where relevant, the expected significant effects arising from the proposed development's vulnerability to major accidents. HSE's role on NSIPs is summarised in the following Advice Note 11 Annex on the Planning Inspectorate's website - Annex G – The Health and Safety Executive. This Document includes consideration of risk assessments on page 3.	The Applicant notes your response.
MOR_009_004_150523	Electrical safety No comment from a planning perspective	The Applicant notes your response.
MOR_009_005_150523	Explosives Advice CEMHD 7's response is no comment to make to the new changes as there are no HSE Licenced explosive sites in the vicinity of the new proposed development.	The Applicant notes your response.
MOR_009_006_150523	Please send any further communication on this project directly to the HSE's designated e-mail account for NSIP applications at nsip.applications@hse.gov.uk.	The Applicant notes your response.
MOR_010_001_230523	I would expect the European Subsea Cables Association guidance on proximity to existing subsea cables to be adhered to.	The Applicant notes your response. Proximity guidance is embedded into the Project's mitigations.
MOR_011_001_240523	Thank you for your correspondence re the offshore windfarm My position at Fylde council is executive member leading environmental issues in Fylde. I have made contact with [REDACTED] in your dept to establish a meeting at Fylde to establish a greater understanding of this topic for elected members, so to inform our residents in Fylde the correct details of your intentions regarding the installation. Please respond to my chief technical officer at Fylde, namely [REDACTED] to facilitate the arrangements.	The Applicant notes your response. The Applicant invited Local Planning Authorities, including Fylde Council, to attend a briefing on the 25 April 2023, providing an overview of the Project's proposals, overview of the consultation and DCO application process.
MOR_012_001_260523	Please see Cadw's comments on the above application. This advice is given in response to a statutory consultation on the proposed Morgan and Morecambe Offshore Windfarms. These proposed windfarms will not have a direct impact on any historic assets in Wales or in Welsh waters. The nearest any of the masts will be to the Welsh coast is over 50km away. As such it would be only in	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>exceptional circumstances (if then) that the windfarms will be visible from Wales and therefore I do not envisage that the proposed wind farms will have any significant impact on the settings of any designated historic assets in Wales.</p>	
<p>MOR_013_001_300 523</p>	<p>Thank you for your email of 20th April 2023 and we hereby offer the following comments on the Preliminary Environmental Information Report (PEIR) for the proposed Morecambe Offshore Windfarm Generation Assets project. We are aware that the PEIR supplied to us is informed by the Scoping Opinion received from the Planning Inspectorate in August 2022. We are also aware that this PEIR is produced in Reference to the Infrastructure Planning (EIA) Regulations 2017 and the requirement on the developer to consult Historic England under Section 42 of the Planning Act 2008. The role of Historic England. As you may be aware, Historic England is the Government's advisor on all aspects of the historic environment in England. Historic England's general powers under section 33 of the National Heritage Act 1983 were extended (via the National Heritage Act 2002) to modify our functions to include securing the preservation of monuments in, on, or under the seabed within the seaward limits of the UK Territorial Sea adjacent to England. We provide our advice in Reference to National Policy Statements and in recognition of the English marine plan areas (inshore and offshore), as defined by the Marine and Coastal Access Act 2009 and the objectives and policies of published.</p>	<p>The Applicant notes your response.</p>
<p>MO_013_002_3005 23</p>	<p>Marine Plans. Summary of matters identified in the PEIR • We found some of the detail contained within Chapter 15 (marine archaeology) to be generic and not drafted to reflect the substance of the proposed project i.e. an exclusively marine development. • The attention given to a contemporary vessel loss (from 1982) was not relevant to assessment of the historic environment and should not be included in the Environmental; Statement (ES).</p>	<p>The Applicant notes your response. The vessel no longer lies within the windfarm site and has been scoped out of any assessment. The latest information on this chapter is presented in Chapter 15 Marine Archaeology and Cultural Heritage of the Environmental Statement (Document Reference 5.1.15).</p>
<p>MO_013_003_3005 23</p>	<p>• The PEIR explains that an Outline Written Scheme of Investigation (WSI) is to be produced and which will accompany any Development Consent Order (DCO) application – we therefore encourage the applicant to discuss with us the scope of this Outline WSI (Offshore);</p>	<p>The Applicant has been in engagement with Historic England throughout the development of the Project via the Evidence Plan Process and Expert Topic Group meetings. The Outline Offshore Written Scheme of Investigation (WSI) (Document Reference 6.10) would be followed by a final WSI (based on the Outline WSI), and to be agreed with Historic England to ensure archaeological objectives are taken into account. A Final agreed WSI would be produced post-consent to be followed by Method Statements for each works package undertaken during all future phases of development.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MO_013_004_3005 23	<ul style="list-style-type: none"> The PEIR explains that the geophysical data obtained for this project is considered sufficient to characterisation of the proposed development area although some geophysical data sets are still undergoing archaeological assessment for inclusion within the ES; and Geotechnical survey is planned to occur after completion of the ES and therefore the ES and accompanying Outline WSI (Offshore) should explain clearly how the archaeological analysis of those data should inform delivery of this proposed development. 	Section 15.5 of Chapter 15 Marine Archaeology and Cultural Heritage of the Environmental Statement (Document Reference 5.1.15) provides the results of the desk-based assessment and the archaeological assessment of marine geophysical and geotechnical data undertaken to date for Offshore Archaeology and Cultural Heritage. Appendix 15.1 and 15.2 (Document References 5.2.15.1 and 5.2.15.2) show this has been taken account into geophysical survey campaigns to date. Section 15.6 and 15.7 of Chapter 15 Marine Archaeology and Cultural Heritage of the Environmental Statement details the results of the impact assessment undertaken for the Project.
MO_013_005_3005 23	<p>Chapter 1 – Introduction</p> <p>It is understood that the project proposed by Cobra Instalaciones Servicios, S.A. and Flotation Energy plc is to construct a renewable energy development with a maximum export capacity of up to 480 megawatts (MW) and an operational and maintenance duration of 35 years. The closest point to the coast is 30km off the Lancashire coast. The generation assets subject to this PEIR will comprise Wind Turbine Generators (WTGs), Offshore Substation Platform(s) (OSPs), intra-array cables and possible Platform link cables between OSPs.</p>	The Applicant notes your response.
MO_013_006_3005 23	We are aware that a Project Design Envelop approach is being used to determine worst-case scenario(s) associated with the different potential construction approaches and to provide flexibility in any consent obtained to take account of changes in available electricity generation and transmission technology. We understand that such flexibility should enable the Applicant to use the most up to date, efficient and cost-effective technology and techniques in the construction, operation, maintenance and decommissioning of the proposed development.	The Applicant notes your response.
MO_013_007_3005 23	<p>Chapter 5 – Project Description</p> <p>The Wind Turbine Generators (WTGs) being considered for this project are rated between 12MW and 24MW, i.e. either 40 smaller or 20 larger WTGs with nominal export capacity of 480MW. We note that the array area overlaps with the Morecambe South Gas Fields with associated platforms, pipelines, cables and wells. We also note that there are live telecommunications cables either crossing the array area or immediately adjacent. The description of WTGs which could be used explains that the blade tip height above Highest Astronomical Tide (HAT) could be between 242 and 345m. We also appreciate that the wind turbine layout will not be finalised until closer to construction, given that detailed preconstruction studies inclusive of site investigations, selection of the preferred WTG design and foundation type(s). In Reference to the importance of finalising the layout arrangements it is apparent that detailed analysis will be required of seabed and sub-seabed conditions. For example, as mentioned in paragraph 5.24 regarding minimum separation distances as necessary for micro siting requirements. This project may require two OSPs each with an</p>	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>anticipated footprint plan of 80m by 55m. We also note the decision not to repurpose existing oil and gas infrastructure to function as OSP(s) as explained in paragraph 5.32. The PEIR states that at this stage foundation design for WTGs could comprise any of the following:</p> <ul style="list-style-type: none"> • Gravity Base Structure (GBS); • Jacket with piling; • Suction bucket monopile; • Monopile; • Tripod; or • Jacket with suction bucket 	
MO_013_008_3005 23	<p>A maximum base slab diameter is described as 65m (Table 5.4), however, Table 5.15 offers a maximum seabed preparation diameter of 100m with maximum depth of seabed preparation of 1m for monopile, monopod suction bucket, pin piled jacket and jacket suction bucket and 1.5m for GBSs. We must question this estimate and to ask for it to be clarified in the ES, so that a full appreciation can be gained of works necessary for installation. Furthermore, that pile diameters could range from 5-14m with up to 60m penetration depth. However, for suction bucket (monopile) the maximum bucket diameter could be 20-40m, but no depth of seabed penetration is offered. We encourage you to prepare an ES which includes such detail, so that full consideration and assessment can be conducted to determine a possible worst-case scenario, as used within the project design envelope approach described in Chapter 6 (EIA methodology), section 6.6.2. For example, the risk to archaeological materials this by GBS installation (as described in Chapter 5, sub-section 5.6.3.4).</p>	<p>The range of foundations options (and associated Project Design Envelope parameters) have been refined since the PEIR, with details of each option updated and detailed in Section 5.5.3 of Chapter 5 Project Description of the Environmental Statement (Document Reference 5.1.5)</p> <p>The seabed preparation area for monopiles has been reduced since the PEIR. This is reflected in this chapter and the realistic worst-case scenario assessments in chapters 7-22 of the Environmental Statement as relevant.</p>
MO_013_009_3005 23	<p>Section 5.6.2 (Pre-installation works) – describes action to clear debris from the cable route and we stress at this point the importance of archaeological advice to differentiate contemporary debris/litter or geological items (e.g. boulders) from other materials which might be of archaeological interest. It is an important matter that paragraph 5.74 confirms the detailed geophysical survey campaign to be conducted no more than 6 months ahead of commencement of intrusive works, which will also include a UXO survey. We therefore encourage the Applicant to plan these investigation programmes (should consent be obtained), which optimise the timely involvement of professional, experienced and accredited archaeological consultants, so that data acquisition and processing allows for avoidance of known heritage assets and identification and avoidance of presently unknown heritage assets. Paragraphs 5.76 and 5.77 explain that before cable laying operations and foundation installation commences that action will be taken to ensure the development area (subject to authorisation) is “...free from obstructions...” by conducting a pre-lay grapnel run. It is therefore crucial that full risk assessment is completed that such clearance operations might encounter archaeological materials.</p>	<p>The Applicant note your response. Pre-installation requirements for archaeology are included in Chapter 15 Marine Archaeology and Cultural Heritage of the Environmental Statement (Document Reference 5.1.15).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Paragraph 5.78 describes the preferred option of avoiding sand waves, but if not possible, a track will be excavated. It is therefore our advice that archaeological analysis using seabed penetrating geophysical data is required to prevent inadvertent impact to presently unknown archaeological materials or historic sites (i.e. crashed aircraft) buried within sand waves.</p>	
MO_013_010_3005 23	<p>Sub-section 5.6.4.1 (WTG installation) – describes the use of jack-up vessels with anticipated seabed footprint. It is therefore a relevant matter that all assessment of risk of encountering elements of the historic environment needs to determine the presence of such material(s) within any area that seabed impacting operations may occur. Section 5.6.6 ('Inter-array and platform link cables) mentions the completion of geotechnical and geophysical investigations to inform this phase of work. We add that it is essential that a detailed picture of what might exist within or under the contemporary seabed is important. It might be the case that archaeological materials, inclusive of palaeo-environmental sequences of archaeological interest, are identified under the depth of proposed cable burial in the array area. Although not directly impacted, it is still the case that access to such materials will subsequently become impossible; this itself represents an 'impact' which requires assessment in the ES with provision made for appropriate mitigation.</p>	<p>The Applicant notes your response. Footprints of jack-up vessels required for Wind Turbine Generators/ Offshore Substation Platform installation are outlined in Section 5.6.2 and are assessed in Chapter 15 Marine Archaeology and Cultural Heritage (Document Reference 5.1.15) and other appropriate chapters (e.g. Chapter 9 Benthic Ecology).</p>
MO_013_011_3005 23	<p>Chapter 6 EIA methodology Section 6.6.3 (Mitigation) describes “embedded mitigation” and “additional mitigation”. It is therefore an important matter that inclusion of the known and risk of the project encountering presently unknown elements of the historic environment are dealt with effectively. In Reference to impact identification, pathway as relevant to construction, operations and maintenance and decommissioning phases of this proposed project.</p>	<p>The Applicant notes your response. Chapter 15 Marine Archaeology and Cultural Heritage (Document Reference 5.1.15) details adaptive mitigation and processes required in relation to encountering unknown elements of the historic environment.</p>
MO_013_012_3005 23	<p>Chapter 7 Marine Geology, Oceanography & Physical Processes We are aware that geophysical survey was conducted across the proposed development area between October and November 2021 and that desk-based sources of information were used, as listed in Table 7.6. Regarding the impact assessment exercise, we note the use of modelling conducted for the proposed Awel y Môr Offshore Wind Farm being developed by RWE Renewables to the west of the existing Gwynt y Môr Offshore Wind Farm and 29km to the south of the proposed Morecambe Offshore Windfarm area. In particular, the use of GBS foundations. The description provided in Section 7.5.2 of the geological units is helpful to consider in Reference to prehistoric archaeological potential and palaeo-environmental interest as detailed within Chapter 15. However, we are aware that geotechnical investigations are proposed for 2023 and 2024 and therefore will not inform preparation of</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>this proposed project's ES. We therefore cannot advise further at this stage as to the potential significance of any prehistoric environmental evidence as might be present and impacted, directly or indirectly.</p>	
<p>MO_013_013_3005 23</p>	<p>Chapter 15 Offshore archaeology and cultural heritage Section 15.1 (introduction), paragraph 15.3 states consideration of the National Planning Policy Framework (NPPF) and in consideration that this PEIR is exclusively for the proposed offshore generation area, it would be helpful to understand why the NPPF is used given the existence of the UK Marine Policy Statement and published North West Marine Plans. Section 15.2 (Consultation), we acknowledge the pre-application liaison that has occurred through the Expert Topic Group (ETG); including</p>	<p>The Applicant notes your response. Reference to the NPPF has been removed from the Environmental Statement. The North West Marine Plan is Referenced in Section 15.4.1 of Chapter 15 Marine Archaeology and Cultural Heritage of the Environmental Statement (Document Reference 5.1.15).</p> <p>A Marine Plan Policy Review has also been submitted with the DCO application (Document Reference 4.7).</p>
<p>MO_013_014_3005 23</p>	<p>the explanation stated in Table 15.1 that specialist geoarchaeological will be commissioned to support the planning of the geotechnical surveys which may take place in 2023 and 2024. In Reference to our advice that data is sourced from monitoring programmes conducted for the South Morecambe Gas Fields, we note that requests have been made and that should such data and information become available it will be included within any ES prepared. Furthermore, in consideration that repurposing of existing oil and gas infrastructure will not take place, it is our advice that survey work completed as part of any decommission programme for the South Morecambe Gas Fields is planned inclusive of archaeological objectives.</p>	<p>The Applicant is not involved with the South Morecambe Gas Fields decommissioning programme, although liaison on activities does occur between the operator and the Applicant. Consultations with oil and gas operators have been undertaken, no information has been made available at the time of writing but lines of communications have been established by the Applicant and any data made available would be considered, as appropriate, as the Project progresses.</p>
<p>MO_013_015_3005 23</p>	<p>Table 15.1 also includes a statement that the analysis and interpretation of Sub-Bottom Profiler (SBP) data is currently being done and that results should inform preparation of the ES. Furthermore, we note the explanation that an Outline WSI (Offshore) will be submitted alongside the DCO application. We therefore ask if a draft will be made available through the ETG for our review and comment prior to ES completion. In particular, we are aware from Table 15.1 that we should be consulted on a method statement for the geotechnical survey to be conducted in 2023. We appreciated the detail provided regarding a "realistic worst-case scenarios" set out in Section 15.3.2 for the historic environment, as might be encountered by this proposed development and design flexibility only when it is needed. However, Table 15.2, in Reference to "largest seabed disturbance (footprint)", focusses on the deployment of monopile foundations, which we see are considered inclusive of monopod suction bucket, pin piled jacket and jacket suction buckets. We note that this estimation takes account of seabed preparation for cables and the operation of jack-up vessels. Regarding "largest seabed</p>	<p>The Applicant has been in engagement with Historic England throughout the development of the Project via the Evidence Plan Process and Expert Topic Group meetings. The Outline Offshore Written Scheme of Investigation (WSI) (Document Reference 6.10) would be followed by a Draft WSI (based on the Outline WSI), and to be agreed with Historic England to ensure archaeological objectives are taken into account. A Final agreed WSI would be produced post-consent to be followed by Method Statements for each works package undertaken during all future phases of development. To date, no marine heritage assets have been identified that have a setting which contributes to their significance.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>disturbance (sediment volume)” the focus is on GBS foundations of 65m diameter (e.g. as could require sand wave levelling) as well as action as might be necessary to lay intra-array cables. We also note that the worst-case scenario impacts is for a 32 month construction phase. Table 15.2, Impact 4 “Impacts to the setting of heritage assets”, it is important to qualify heritage assets for which setting contributes to their significance whether such heritage assets are submerged, buried, exposed on the seabed.</p>	
<p>MO_013_016_3005 23</p>	<p>Section 15.3.3 (summary of mitigation embedded into the design), Table 15.3 described the use of Archaeological Exclusion Zones (AEZs) for “archaeologically significant anomalies that are clearly identifiable in the survey data and where the extents are largely known”. It is important to clarify that if it is the intention to use AEZs for archaeologically significant anomalies that the ES is to include detailed assessments of identifiable interest for which we can advise as to the archaeological significance. For example, in Reference to UK government policy for underwater cultural heritage. In consideration of the explanation provided about the present incomplete archaeological review of commissioned geophysical data, the identification and use of Temporary Archaeological Exclusion Zones (TAEZs) is therefore important. We noticed that avoidance by micro-sitting of design is to be informed by the acquisition of high-resolution geophysical survey data post-consent, should authorisation be obtained. However, we welcome further discussion about differences between embedded and adaptive mitigation. We appreciate that identified anomalies (as mentioned in Table 15.3) that are of archaeological interest should be avoided. However, all parties require reassurance that any detailed design phase will be directly informed and subject to change in consideration of presently unknown anomalies of archaeological interest, as could be encountered by this proposed development. Paragraph 15.17 explains how negative impacts associated with the proposed development can be achieved through further geophysical and geoarchaeological investigations to reduce as far as possible “unintended impacts”. It seems to also suggest that such impacts can be offset by professionally executed and published archaeological studies. We must add that fully demonstrating and delivering this expectation is essential to implement mitigation that is required for heritage assets. We concur with the statements made in paragraph 15.18 in Reference to AEZs and the ES produced for this project should explain AEZ management measures for the anticipated project lifetime. We also confirm that any ES prepared for this proposed project should be accompanied by an Outline (archaeological) WSI (Offshore).</p>	<p>Section 15.5.2.1 and Section 15.6.1 of Chapter 15 Marine Archaeology and Cultural Heritage (Document Reference 5.1.15) includes a description of the archaeological interest of heritage assets to which an AEZ has been assigned.</p> <p>Comments are also addressed in the Outline Offshore Written Scheme of Investigation (Document Reference 6.10), as submitted within the DCO application.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MO_013_017_3005 23	Section 15.4 (Impact assessment methodology) – we note the attention given to National Policy Statements and the 2021 consultation exercise. We are also aware that a further consultation exercise is presently ongoing and is likely to affect the content of any ES subsequently produced. We note the description provided in paragraph 15.25 that the proposed Morecambe Offshore Wind Farm array area spans the English North West Inshore and Offshore Marine Plan areas. It would therefore be appreciated if any subsequent ES produced for this proposed development includes a figure to illustrate where the marine planning boundary runs through the array area. It is important to confirm that while presently there are no designated heritage assets, should material of archaeological and/or historic significant interest be encountered within the North West Inshore Marine Planning area that a recommendation for designation could be made to DCMS Secretary of State.	<p>The Project is not located within the North West Inshore Marine Planning Area (see Figure 15.2 in Chapter 15 Marine Archaeology and Cultural Heritage (Document Reference 5.1.15)).</p> <p>The Project only spans the North West Offshore Marine Plan area (Figure 15.2 in Chapter 15 Marine Archaeology and Cultural Heritage).</p> <p>A full assessment of potential impact on North West Marine Plan policies is presented in the Marine Plan Policy Review (Document Reference 4.7).</p>
MO_013_018_3005 23	Paragraphs 15.29 – 15.32 (under the sub-heading “Policy”) explains the inclusion of this historic environment within the NPPF. However, no element of this proposed development occurs within terrestrial planning authority jurisdiction, so it is not apparent why this information is included. Furthermore, paragraph 15.33 states that the assessment takes account of the UK Marine Policy Statement (UK MPS) which does not appear to reflect that the UK MPS has equivalent (planning policy) status to NPPF. Paragraph 15.34 mentions the published North West Marine Plans objectives which are inclusive of heritage assets and the accompanying policy (Table 15.5). We must therefore recommend that detail is included within the ES to fully explain your strategy of avoidance. The application of AEZs is to be included with an explanation about an adaptive approach whereby the detailed design phase is informed by professional, accredited and experienced archaeological contractors/consultants, so that presently unknown elements of the historic environment can be avoided without harm. On this point we must make it clear that attempting to “repair damage” to archaeological sites can never be considered as mitigation. We therefore direct you to the acknowledgement of this matter in paragraph 15.65.	<p>Reference to the NPPF has been removed from the ES. The North West Marine Plan is Referenced in Section 15.4.1 of Chapter 15 Marine Archaeology and Cultural Heritage (Document Reference 5.1.15). A Marine Plan Policy Review has also been submitted with the DCO application (Document Reference 4.7).</p> <p>Embedded mitigation measures (including avoidance strategies) are set out in Section 15.3.3 of Chapter 15 Marine Archaeology and Cultural Heritage). The Outline Offshore Written Scheme of Investigation (WSI) (Document Reference 6.10), which includes details of Offshore Renewables Protocol for Archaeological Discoveries (ORPAD) to mitigate presently unknown elements of the historic environment, would be followed by a Draft WSI (based on the Outline WSI), and to be agreed with Historic England to ensure archaeological objectives are taken into account. A Final agreed WSI would be produced post-consent to be followed by Method Statements for each works package undertaken during all future phases of development. This sets out a procedure for temporary AEZs to be established where new discoveries of potential archaeological significance are found in the construction process.</p>
MO_013_019_3005 23	Paragraph 15.35 duplicates the Gribble and Leather 2011 Reference and should be expanded to include Historic England Advisory Note (No 15) Commercial Renewable Energy Development and the Historic Environment (2021)1. We also offer the following for inclusion: • ‘Deposit Modelling and Archaeology’ (https://historicengland.org.uk/imagesbooks/publications/deposit-modelling-and-archaeology/); and • ‘Radiocarbon Dating and Chronological Modelling’ (https://historicengland.org.uk/images-books/publications/radiocarbon-datingchronological-modelling/) Section 15.4.2 (Data and information sources) – we are aware that a	<p>References have been added/amended in Chapter 15 and the Outline Offshore Written Scheme of Investigation (Document Reference 6.10) as appropriate.</p> <p>The importance of a cultural heritage asset is a measure of the degree to which cultural significance of that asset is sought to be protected. Legislation and planning is based on concepts of national/regional/local ‘importance’. The use of the word perceived denotes professional judgement. Cultural significance is not scaled, but articulates what is valued about it, which in turn informs a professional judgement on</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>geophysical site characterisation survey was conducted in October and November 2021 and that those data collected: Side Scan Sonar (SSS); Multi Beam Echo Sounder (MBES); Magnetometer; and Sub Bottom Profiler (SBP) were considered to be of “good quality overall” and of an “appropriate specification, coverage and quality” for “robust archaeological assessment” (paragraph 15.41). However, we did note that geophysical survey data could not be collected within 500m of any oil/gas infrastructure as located in the proposed array area. Section 15.4.3 (Impact assessment methodology) – paragraph 54 includes a bullet point about “the perceived heritage importance of identified assets”. However, importance is scaled, not perceived using defined criteria (e.g. national or international importance) and therefore this bullet point should be revised in any ES prepared for submission.</p>	<p>importance and the ‘perceived’ sphere of interest in which it is valued (discussed in the Expert Topic Group Meeting 4 – 14 June 2023).</p>
<p>MO_013_020_3005 23</p>	<p>Paragraph 15.54 should Reference UK MPS, Section 2.6.6 as the relevant planning policy Document. In this regard, the assessment offered in the ES will need to determine whether an anomaly encountered on, within or under the contemporary seabed of can be considered to represent a heritage asset (i.e. its significance and what contributes to that significance). The determination of cultural heritage importance can only occur thereafter which in turn, will have a bearing on the matters detailed in Sub-section 15.4.3.4 (Effect significance). While we note the generic approach used in drafting Table 15.8, we suggest that in the ES supplementary action should be taken to tailor the criteria to be relevant to this proposed development project. Similarly, paragraph 15.73 attempts to describe “benefits” and enhancement of the historic environment without giving consideration to the actuality of the proposed development. It would therefore not appear to be the case that the benefits outlined in paragraph 15.74 are alternatives. Section 15.5.1 (Seabed prehistory) – describes the potential for the development area to contain palaeo-environmental sedimentary sequences of geoarchaeological interest. We also note the referral to the geoarchaeological assessment of available survey data provided in Appendix 15.1.</p>	<p>The importance of a cultural heritage asset is a measure of the degree to which cultural significance of that asset is sought to be protected. Legislation and planning is based on concepts of national/regional/local ‘importance’. The use of the word perceived denotes professional judgement. Cultural significance is not scaled, but articulates what is valued about it, which in turn informs a professional judgement on importance and the ‘perceived’ sphere of interest in which it is valued (discussed in the Expert Topic Group Meeting 4 – 14 June 2023).</p> <p>While the EIA matrix reflects the overarching methodology of the Project, the ES chapter is tailored within the baseline and impacts sections of Chapter 15 Marine Archaeology and Cultural Heritage (Document Reference 5.1.15).</p> <p>Further the Offshore Outline Written Scheme of Investigation (Document Reference 6.10), as submitted within the DCO application reinforces commitments to public benefits.</p>
<p>MO_013_021_3005 23</p>	<p>However, we note the opinion offered is that there is “limited archaeological potential” from the Quaternary period sedimentary sequences identified. Paragraph 15.123 explains that 38 anomalies of “potential archaeological interest”, 6 anomalies are classed as being of “medium archaeological potential” and 26 anomalies identified as being of “low archaeological potential”. Regarding the medium potential anomalies, we note the detail provided in paragraphs 15.129 and 15.130 and the likelihood of wreck and associated debris fields being present. Furthermore, paragraph 15.125 identifies magnetometer data of possible archaeological interest and therefore this location, should it be subject to UXO investigation, merits further attention to qualify any</p>	<p>The Applicant notes your response. The approach to further assessment is provided in the Offshore Outline Written Scheme of Investigation (Document Reference 6.10), as submitted within the DCO application.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>historic environment interest. The statement made in paragraph 15.147 is particularly important regarding the risk of presently undetected archaeological features. Sub-section 15.5.2.3 (Historic environment records) includes information about a vessel lost in 1982, we concur with the conclusion that it is not relevant to this assessment and add that such detail was not required and does not need to be replicated in the ES.</p>	
MO_013_022_3005 23	<p>Section 15.5.4 (Historic Seascape Character and setting) – We see that use was made of the consolidated national Historic Seascape Character (HSC) GIS dataset, as described in paragraph 15.166. Table 15.21 summarises the situation in Reference to broad character types and perceptions of change e.g. industry, navigation and fishing and we have no further comment to offer at this stage.</p>	The Applicant notes your response.
MO_013_023_3005 23	<p>Section 15.6 (Assessment of effects) – It is stated that there is the potential for direct impacts on the historic environment due to the proposed construction works. The development therefore has the potential to physically disturb/damage remains or their relationship to the wider environment, that would result in adverse impact (paragraph 15.171). Tables 15.22 15.23 spatially describes AEZs and a TAEZ which we are prepared to accept on the basis of the information presented to us in this AEZ.</p>	The Applicant notes your response.
MO_013_024_3005 23	<p>Paragraph 15.175 acknowledges the importance of archaeological assessment of preconstruction survey data and we will offer further comment on the proposed methodological approach to survey data acquisition and analysis as should be set out within an Outline WSI (Offshore). Section 15.6.1.2 (Impact 2: Direct impact to potential heritage assets) – we are pleased to see the attention given to unknown heritage assets as might be present and the accompanying conclusion of “high adverse magnitude” without additional mitigation. We are therefore prepared to concur, at this stage, with the measures set out in paragraph 15.187 – 15.198 (Additional mitigation).</p>	The Applicant notes your response. The Outline Offshore Written Scheme of Investigation (Document Reference 6.10) has been submitted with the DCO application, detailing the delivery of measures identified.
MO_013_025_3005 23	<p>In Reference to “Residual effect”, as set out in paragraphs 15.199 – 15.202 we note the conclusion of residual effects no higher than minor adverse significance will be dependent on delivery of the measures as set out in Section 15.3.3. We apply the same advice to impacts as identified in Section 15.6.2 (potential effects during operation and maintenance). We also note the explanation offered regarding Section 15.6.3 (potential effects during decommissioning) and that a detailed assessment is not offered.</p>	<p>The Applicant notes your response. The Outline Offshore Written Scheme of Investigation (Document Reference 6.10) has been submitted with the DCO application, detailing the delivery of measures identified.</p> <p>The Decommissioning Plan for the Project would be submitted to the Secretary of State for approval closer to the time and will take account of relevant circumstances and potential mitigation measures towards the end of the lifetime of the Project.</p>
MO_013_026_3005 23	<p>Section 15.7 (Cumulative effects) – We note the detail provided in Table 15.24 and the identified potential for cumulative effect for construction, operations & maintenance and decommissioning phases. We have no further comment to offer at this stage regarding the four impact</p>	The Applicant notes your response. The Offshore Outline Written Scheme of Investigation (Document Reference 6.10) has been submitted with the DCO application.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>scenarios described. In Reference to the assessment of cumulative effects (sub-section 15.7.3), we welcome the statement made in paragraphs 15.255 and 15.256 regarding the willingness to contribute mapped archaeological assessment data to a strategic initiative to optimise use of data to build a better understanding about the cumulative effect of offshore wind development within the West coast marine region. We therefore look forward to receiving the (draft) Outline WSI (Offshore) to see the clarification promised about how this strategic approach might be facilitated.</p>	
<p>MO_013_027_3005 23</p>	<p>Section 15.11 (Potential monitoring requirements) – We are pleased to see that monitoring requirements will be described within an In-Principle Monitoring Plan (IPMP), as well as the use of the Outline WSI (Offshore) to guide use of survey data obtained post construction. However, we require clarification regarding the preparation of a phase specific WSI rather than referral to an Outline WSI. We request that clarification regarding this matter is provided in the ES. For example, to deliver the commitments set out in paragraphs 15.278 – 15.280 and if a post-consent WSI (subject to authorisation), will be produced to steer archaeological analysis and interpretation by a professional, accredited and experienced marine archaeological contractor/consultant.</p>	<p>An Outline Offshore Written Scheme of Investigation (WSI) (Document Reference 6.10) has been submitted with the DCO application. The WSI would form an umbrella Document, for all survey, investigation and assessment supported by activity-specific Method Statements, which will be consulted upon and agreed by Historic England. The Outline WSI would be followed by a pre-commencement Draft WSI (based on the Outline WSI) to be agreed with Historic England prior to the surveys taking place to ensure archaeological objectives are considered. A final agreed WSI would be produced post-consent to be followed by Method Statements for each works package undertaken during all future phases of development.</p>
<p>MO_013_028_3005 23</p>	<p>Appendix 15.1: Archaeological Assessment of Geophysical and Hydrographic Data This appendix effectively synthesises all the available evidence and clearly outlines our current level of understanding, identifies relevant research questions and sets out how to proceed. From the palaeolandscape/ palaeoenvironmental perspective, the primary focus for attention should be on refining the deposit model, especially in relation to the timings of the various marine transgressions (due to the current conflicting models) to gauge how much human activity may have been taking place in the Irish Sea. Therefore, it is crucial that a well-thought-out geoarchaeological/geotechnical programme be designed and implemented and set out clearly within the Outline WSI (Offshore). We will therefore offer further advice as and when a draft is provided to us for review.</p>	<p>The Applicant notes your response. The Outline Offshore Written Scheme of Investigation (WSI) (Document Reference 6.10) would be followed by a Draft WSI (based on the Outline WSI), and to be agreed with Historic England to ensure archaeological objectives are taken into account. A Final agreed WSI would be produced post-consent to be followed by Method Statements for each works package undertaken during all future phases of development.</p> <p>The Applicant has also engaged with Historic England on the Project's Phase 3 Geotechnical and Geophysical Surveys, which at the time of writing are now underway.</p>
<p>MOR_014_001_300 523</p>	<p>Thank you for your letter dated 20 April 2023, notifying the Marine Management Organisation (the "MMO") of Flotation Energy's intention to submit an application for development consent under the Planning Act 2008 (the "2008 Act") to build an offshore wind farm with a nominal capacity of 480 megawatts (MW) off the coast of Blackpool. The MMO's role in Nationally Significant Infrastructure Projects. 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 responsibilities of the MMO include the</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>licensing of construction works, deposits and removals in English inshore and offshore waters and for Welsh and Northern Ireland offshore waters by way of a marine licence¹. 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. In the case of Nationally Significant Infrastructure Projects (“NSIPs”), the 2008 Act enables Development Consent Order’s (“DCO”) for projects which affect the marine environment to include provisions which deem marine licences².</p> <p>As a prescribed consultee under the 2008 Act, the MMO advises developers during preapplication 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 of the sea and any potential impacts on the marine environment from terrestrial works. 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 website³. Further information on the interaction between the Planning Inspectorate and the MMO can be found in our joint advice note⁴</p> <p>Morecambe Offshore Wind Farm Generation Assets Flotation Energy are proposing to construct between 20 and 40 fixed-bottom turbines and a maximum of two offshore substation platforms. The site is 125 square kilometres (km²) and sits approximately 30 kilometres (km) from the Lancashire coast. A separate DCO application is being submitted for the transmission assets. The MMO has reviewed the consultation Documents received 13 April 2023 and sets out our initial comments below. The MMO reserves the right to make further comments on the Project throughout the pre-application process and may modify its present advice or opinion in view of any additional information that may come to our attention.</p>	
MO_014_002_3005 23	<p>Chapter 5: Project Description Minor Comments</p> <p>1.1. In Chapter 5 Section 5.6.3, it states that “only one foundation will be installed at any one time in the windfarm site, including only one piling activity occurring at any one time”. This implies that no concurrent /simultaneous piling activity will occur during the construction phase of the project. If concurrent/simultaneous piling is expected, then the</p>	<p>It is confirmed that the construction assumptions are that one foundation is installed at a time, with no concurrent piling planned for the Project. This is reflected in the underwater noise modelling Appendix 11.1 (Document Reference 5.2.11.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	underwater noise impact assessment would need to be revised to include appropriate modelling. The modelling would need to be based on the maximum hammer energy for a concurrent piling scenario, from a suitable piling location, so that the worst-case scenario in terms of maximum impact range can be more accurately determined and mitigation measures can be recommended, if appropriate.	
MO_014_003_3005 23	Chapter 6: Environmental Impact Assessment (EIA) Methodology Major Comments 2.1. The MMO reiterate the comment made by Natural England (NE) (Table 6.3) that without export cabling the offshore wind farm (OWF) is not functional and so it is not possible to assess the full impact of the OWF whilst excluding the transmission assets. Table 6.3 indicates that the Environmental Statement (ES) will include both the generation and transmission assets under a cumulative assessment – however, cumulative assessments are not standardised and therefore, frequently less detailed. It is the view of the MMO that all foreseeable consequences of constructing the OWF are integral to environmental assessments. Therefore, the methodology proposed in Table 6.3 does not address these concerns.	Concerns have been discussed with the MMO and other stakeholders. In each ES technical chapter, a separate assessment considering both Generation Assets (the Project) and the Transmission Assets is undertaken in the cumulative section, before consideration of all plans and projects. In addition, a separate ES chapter (Chapter 23 Summary: Generation and Transmission Assets Assessment (Document Reference 5.1.23)) consolidates and summarises into one Document the potential impacts of the Project (Generation Assets) and the Transmission Assets as a whole and also provided as part of the DCO application for information, including consideration of all potential impact pathways. See Section 6.7.4 of Chapter 6 EIA Methodology for more information.
MO_014_004_3005 23	Chapter 7: Marine Geology, Oceanography and Physical Processes Major Comments 3.1. There is possible sediment suspension from bedload higher into the water column due to turbulence around the foot of monopiles. Table 7.4 states that to investigate this is not proportionate to the conceptual EIA method being used. The MMO considers this insufficient justification for the screening out of an impact. If this pathway exists, this could alter the assessment of sediment suspension significance, thereby affecting the assessments of the Marine Conservation Zones (MCZ) and Habitats Regulation Assessment (HRA) also. There is a growing evidence base for the scale of hydrodynamic changes around OWFs (Schultze et al., 2020 and Christiansen et al., 2023) and that vertical mixing effects of monopiles are greater and more laterally extensive than suggested by models (Forster, 2018). Given the possibility that the local impacts may result in hydrodynamic changes extending to regional scales (Christiansen et al., 2023), the potential for impacts should now be recognised and discussed in the ES for any OWF.	Wakes caused by the presence of foundation structures are discussed in Section 7.6.3.1 of Chapter 7 Marine Geology, Oceanography and Physical Processes (Document Reference 5.1.17). This is followed by a discussion of the effect of vertical redistribution of sediment plumes in the lee of foundation structures in Section 7.6.3.3 in Chapter 7 Marine Geology, Oceanography and Physical Processes.
MO_014_005_3005 23	3.2. The main information gaps still remain around the justification for the use of proxy data from another OWF site for the Morecambe OWF, relating to the transferability of data based on numerical-magnitude comparison of the sites. Qualitative location-specific detail is required to enhance the mainly quantitative comparison made to date, to illustrate the implied impact envelopes for the Morecambe OWF site itself. Proxy data could be beneficial in assessing the following:	Numerical modelling is now available for Mona and Morgan via their respective PEIRs (Morgan Offshore Wind Limited, 2023 and Mona Offshore Wind Limited, 2023) and has therefore also been considered within the ES assessment. A justification for the conceptual approach using the modelling from Awel y Mor Offshore Wind Farm (AyM), Mona and Morgan are provided in Section 7.4.3.3 of Chapter 7 Marine Geology, Oceanography and Physical Processes (Document Reference 5.1.7), which includes comparison of tidal, wave and sediment transport conditions. The proximity of Morgan and Mona to the Project and the larger scale of these developments further justify the

Unique Reference Identifier	Consultation response received	Applicant response
	<ul style="list-style-type: none"> • Comparing the alignment and spacing of monopiles relative to the direction of the current and wave flow. • The distance over which wave and currents are interacting with piles. • The direction of bathymetric shoaling relative to wave/current direction and monopile alignments. The significance of sedimentary boundaries within the sites (Figure 7.3 and 7.4) and their relation to tidal flow speeds within the OWF boundary. 	<p>use of modelling carried out by these projects to inform the Project conceptual assessment, in addition to the modelling data for AyM. This approach was confirmed as 'largely appropriate' by the MMO (MMO, 2023) and 'presents an improvement to the previous conceptual approach and will result in a better supported ES' by Natural England (Natural England, 2023).</p> <p>The layout of infrastructure within the windfarm would be finalised post-consent, however it is believed that the precautionary nature of the modelled parameters for Morgan and Mona and the AyM would override any differences due to relative orientations in alignment and spacing.</p>
MO_014_006_300523	3.3. The MMO recommends a more detailed discussion around the interaction of the impacts on hydrodynamics due to the alignment of Mona and Morgan windfarms immediately seaward of the Morecambe OWF, including the potential for overlapping and the potential for this to increase the 'fetch' of drag-affected flows. Additionally, this alignment of OWF sites may also increase the area affected by the above-mentioned vertical changes in sediment suspension.	This is assessed in the Cumulative Effects Assessment in Section 7.7.3.2 of Chapter 7 Marine Geology, Oceanography and Physical Processes (Document Reference 5.1.7).
MO_014_007_300523	3.4. Throughout the PEIR, impacts are represented on figures showing Awel y Mor wind farm only. For the Environmental Statement, the MMO recommends these impacts are mapped for Morecambe OWF.	The figures used in the PEIR showing Awel y Mor (AyM) Offshore Wind Farm were taken from their hydrodynamic and sedimentary modelling report by AyM Offshore Wind Farm Ltd. (2022a). As explained in Section 7.4.3.3 of Chapter 7 Marine Geology, Oceanography and Physical Processes (Document Reference 5.1.7), results from numerical modelling undertaken for Morgan and Mona (as well as AyM) are now also incorporated into the ES assessment in Section 7.6 of Chapter 7 Marine Geology, Oceanography and Physical Processes. In a similar approach, the Zone of Influence (Zol) has been used to describe effects anticipated at the Project. While effects are not visualised (although the Zol has been mapped), the information is explained in text and numerically.
MO_014_008_300523	3.5. The MMO note that the assessment has presented modelling of wave and ideal current changes, however sediment transport has not been modelled or calculated. It is therefore unknown what the combined impact of the wind farms in the area will have on the change to the sediment budget. The report assumes limited impact, however this would need to be evidenced with: <ul style="list-style-type: none"> • References to specific numerical thresholds. • An analysis of the cumulative development of the connected marine process systems within the bay, and whether this system responds unexpectedly to change over time. 	A cumulative assessment of all windfarms in the study area is undertaken in Section 7.7.3.2 of Chapter 7 Marine Geology, Oceanography and Physical Processes (Document Reference 5.1.7). Baseline sources have been used to define the sedimentary regime and a conceptual assessment is made on the likely effects to changes as a result of the Project and cumulatively. The assessment (including consideration of numerical modelling for Mona, Morgan and Awel y Mor offshore wind farms) identified no cumulative impact on the physical processes, and as such no cumulative impact on sedimentary processes which are driven by them.
MO_014_009_300523	Minor Comments 3.6. Section 7.167 states redeposition and redistribution of sand, arising from sand wave clearance within the area will allow rapid reformation of these features. The MMO recommends the report states whether the sand will be placed directly up or downstream of the features and whether this is based on any process knowledge.	The excavated sediment due to sandwave levelling would be disposed of within the windfarm site. This means there would be no net loss of sand from the physical processes system. It is likely that some of this sand could be disposed on the upstream side (to the west) of any feature where tidal currents would, over time, redistribute the sand back over the levelled area (as re-formed sandwaves). The overall effect of changes to the seabed would therefore be minimal. This was discussed at

Unique Reference Identifier	Consultation response received	Applicant response
MO_014_010_3005 23	<p>Chapter 8: Marine Sediment and Water Quality</p> <p>Minor Comments</p> <p>4.1. Chapter 8 details the evidence provided to inform the future Scoping and EIA assessments. A preliminary benthic characterisation survey was undertaken in Summer 2022 (Volume 2, Appendix 9.1), which comprised 50 sample sites, 20 of which were tested for trace metals, organotins, polycyclic aromatic hydrocarbons (PAHs), total hydrocarbons (THC) and polychlorinated biphenyls (PCBs). Analyses were conducted by SOCOTEC, who is validated by the MMO for all the analyses tested for. Sampling was also conducted for particle size analysis (PSA) (n = 50) by Ocean Ecology Ltd, who is validated by the MMO for PSA. As well as bespoke sampling, the developer has also used contaminant data from other Wind Farm applications such as Walney Extension, West of Duddon Sands and Awel y Mor. 4.2. To inform the baseline environment, the MMO consider the data gathered to be acceptable and do not consider there to be any major gaps that require correcting. The results of the baseline environment review indicate the area to be predominantly fine sand (median particle sizes ranging between coarse silt and medium sand), with 10 – 30% mud (silt) in most samples. For contaminants, the review finds levels of the contaminants listed in point 11 to be generally low, which is to be expected this far from the shore / the nearest estuary (~30 km). This is supported by the bespoke characterisation survey, wherein, of particular relevance, none of the 20 samples exceeded the Action Level 1 (AL1) for any trace metal or PAH. 4.4. The MMO would expect the report to clarify if this is also the case for the organotin and PCB data, as these are not readily detailed in the report as the trace metals and PAHs data are.</p>	<p>ETG5 and the MMO confirmed they had no further comments. As shown in Figure 7.3 there are no sandwaves within the windfarm site.</p> <p>The Applicant notes your response. Data is presented in Chapter 8 Marine Sediment and Water Quality of the Environmental Statement (Document Reference 5.1.8). Some parameters recorded values below the limit of detection and therefore the data is not presented within the text. This is outlined in Section 8.5.2 of Chapter 8 Marine Sediment and Water Quality.</p>
MO_014_011_3005 23	<p>Chapter 10: Fish and Shellfish Ecology</p> <p>Major Comments</p> <p>5.1. The MMO recommend that the herring spawning habitat suitability assessment use the method described by MarineSpace (2013). The MMO also recommend acquiring Northern Irish Herring Larvae Survey (NIHLS) data to inform the assessment, which would be applied in lieu of the International Herring Larvae Survey (IHLS) data used in MarineSpace (2013).</p>	<p>As agreed in the Expert Top Group (ETG) meeting on 11 October 2023, herring spawning habitat heatmapping, using NIHLS data from the previous 10 years has been undertaken and is presented in Section 10.5.4 Chapter 10 Fish and Shellfish of the Environmental Statement (Document Reference 5.1.10).</p> <p>The most recent 10-years of NIHLS data has been provided by AFBI and these have been used to produce a heatmap of herring larvae distribution in the northern Irish Sea using kernel density interpolation in GIS, as agreed in the Marine Ecology ETG on 11 October. This recent data shows that the likely present-day extent of the Isle of Man herring spawning ground maps closely onto the historical spawning ground extent defined by Coull et al., (1998) (Figure 10.6 (Document Reference 5.3.10)). Given this appraisal of recent data, there is no reason to consider that the location and extent of the known herring spawning ground at the Isle of Man has meaningfully shifted in recent years.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MO_014_012_3005 23	5.2. The 'heatmapping' approach used in MarineSpace (2013) has not been followed, therefore no 'confidence scores' have been assigned to the various data layers. For a development of this nature and scale, and given noise-generating activities proposed, the report should present a minimum of 10 years of NIHLS data, as per the MarineSpace (2013) method, and used this, alongside British Geological Survey (BGS) and historic spawning ground data to present a proper heatmap which would better indicate the full extent and intensity of spawning activity around the Isle of Man.	As agreed in the Expert Topic Group meeting on 11 October 2023, herring spawning habitat heatmapping, using NIHLS data from the previous 10 years, has been undertaken and is presented in Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). This is presented alongside BGS and historic spawning ground data to indicate the likely present-day extent of the IoM herring spawning ground. Given this appraisal of recent data, there is no reason to consider that the location and extent of the known herring spawning ground at the IoM has meaningfully shifted in recent years
MO_014_013_3005 23	5.3. The MMO advise that the final report should include an appropriate heatmap for the Isle of Man herring spawning ground. Once this has been done, the mapped noise contours from appropriate underwater noise modelling can be overlaid. The modelled noise contours presented should include thresholds for mortality and potential mortal injury, recoverable injury, and temporary threshold shift (TTS) as per the pile driving threshold guidelines described by Popper et al. (2014).	As agreed in the Expert Topic Group meeting on 11 October 2023, herring spawning habitat heatmapping, using NIHLS data from the previous 10 years, has been undertaken and is presented in Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). The heatmap is overlaid with noise contours in Figure 10.6 (Document Reference 5.3.10). Given this appraisal of recent data, there is no reason to consider that the location and extent of the known herring spawning ground at the IoM has meaningfully shifted in recent years.
MO_014_014_3005 23	5.4. In Section 10.6.2.4 the modelled noise impacts overlap 4% of the herring spawning ground. The MMO do not recommend the use of calculated total available herring spawning habitat, as this would assume that the population will spawn in the same area every year and will successfully spawn in a reduced area – which is inaccurate. Herring will return to a broad area to spawn annually, but the exact locations change year on year, therefore the impacts to herring spawning ground is not something that can be easily defined by proportion or percentages.	Noise impact contours for Chapter 10 Fish and Shellfish Ecology of the Environmental Statement (Document Reference 5.1.10) are displayed visually, alongside the herring spawning heatmap and historical spawning ground extent, in Figure 10.6 (Document Reference 5.3.10). Due to the refinement in windfarm site since PEIR (removal of the western portion of the Agreement for Lease (AfL) area), the 4% overlap mentioned by the MMO no longer occurs, due to greater distance of the monopiles from the Isle of Man spawning ground. However, as recommended by the MMO, quantified levels of overlap are no longer mentioned in Section 10.6.2.4 in Chapter 10 Fish and Shellfish Ecology and the assessments considers the limitations of the boundaries of spawning grounds
MO_014_015_3005 23	5.5. The MMO recommend a detailed assessment for the impacts of underwater noise from piling is undertaken, using the most recent evidence for Atlantic cod, and including the potential impacts to eggs and larvae. Eggs/larvae can be damaged by noise at levels exceeding 207 decibels (dB) (Popper et al., 2014). The MMO recommend modelling for the peak sound pressure level (SPL _{peak}) of 207dB for eggs and larvae following a worst-case scenario.	Noise impact modelling for eggs and larvae, based on the SPL _{peak} reported by Popper et al. (2014), is now included in Section 10.6.2.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). A literature search for noise impact information for Atlantic cod has been undertaken and no new noise impact thresholds have been established beyond those set out by Popper et al. (2014). However, new information suggests that pile driving at a distance of 2.3 – 7.1km causes cod to move closer to the hard substrate they are associating with during and after piling (Van der Knaap et al., 2022). The consequences of the modest change in movement patterns in the study are unclear, but are surpassed in magnitude by the potential impacts considered by Popper et al. (2014). Treating Atlantic cod as stationary receptors in the modelling ensures that impact ranges are sufficiently conservative.
MO_014_016_3005 23	5.6. Section 10.6.3.4 discusses the impacts of electromagnetic field (EMF) to fish receptors from the proposed works. This section should include new and additional peer reviewed studies specific to EMF impacts from OWFs. For example, studies such as Hutchison et al., (2020; 2021) should inform the assessment of EMF impacts to electro-receptive species.	Literature has been reviewed and Hutchison et al., (2020; 2021) has been used to inform the assessment of EMF impacts in Section 10.6.3.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). However, it should be noted that some new peer reviewed studies, such as Hutchinson et al. (2020), focus on DC currents, which have limited relevance to the AC cables assessed for this Project.

Unique Reference Identifier	Consultation response received	Applicant response
MO_014_017_3005 23	5.7. The MMO note that the Isle of Man OWF has not been scoped into the cumulative impact assessment. The Isle of Man OWF is being developed and is in the concept/early planning stage. The Isle of Man OWF will likely show potential cumulative impacts from noise disturbance to a number of fish species. The Isle of Man OWF should therefore be included in the assessment, to ensure all cumulative impacts are appropriately assessed in relation to herring spawning.	The Isle of Man offshore windfarm project (Moor Vannin) has been considered in the cumulative impact assessment screening (Table 10.38 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10)) and assessed using the publicly available information at the time of writing, as set out in the cumulative effects assessment (Section 10.7 in Chapter 10 Fish and Shellfish Ecology).
MO_014_018_3005 23	5.8. Section 10.189 (Chapter 10) refers to fish as a fleeing receptor, however the MMO considers fish should be assessed as a stationary animal. When considering a stationary animal, the impact ranges are increased as a result of sequential piling.	On a precautionary basis, all fish have been treated as stationary receptors for the underwater noise impact assessment, including for sequential piling (Section 10.6.2.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10)).
MO_014_019_3005 23	5.9. Table 10.25 (Chapter 10) the maximum impact range for monopile (hammer energy 5,000 kilojoules (kJ) has been modelled as 47.2km. The MMO note that it should be clarified if this metric has been modelled from the northwest location of the windfarm.	Due to A) Changes in the potential hammer models to be used for the Project; and B) Refinements of the windfarm site, updated noise modelling has been undertaken for a maximum hammer energy of 6,600kJ. Updated cumulative sound exposure level (SELcum) impact ranges are found in Table 10.25 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10), and these are based on the worst-case (deepest) modelling location, which is the southwest location. The deepest modelling location (southwest) has consistently produced the largest SELcum impact ranges in previous modelling iterations for the Project. The worst-case Popper et al. (2014) derived SELcum impact ranges from the southwest location are precautionarily applied across the site. However, the greatest impact range considered for herring is the conservative 135dB SELSS threshold, applied specifically to temporary behavioural changes for spawning herring. This is the most relevant worst-case range for spawning herring and is displayed in Figure 10.6 (Document Reference 5.3.10) for all modelling locations. The position of the 135dB SELSS contours in relation to IoM spawning grounds (as defined by Coull et al., 1998) and a heatmap of herring larvae produced with recent NINEL herring larvae data, gives a more complete picture of the potential for behavioural impacts on spawning herring. Based on Figure 10.6, there is no overlap with the historical spawning grounds from the Project-alone impacts.
MO_014_020_3005 23	5.10. Clarification on this is important because in Section 10.5.2.4 the modelling is used to discuss the impacts to the Isle of Man herring spawning ground. The northwest location of the site will likely be the nearest point to the herring spawning ground and thus is the recommended point to model for an appropriate worst-case scenario assessment.	Due to A) Changes in the potential hammer models to be used for the Project; and B) Refinements of the windfarm site, updated noise modelling has been undertaken for a maximum hammer energy of 6,600kJ. Updated cumulative sound exposure level (SELcum) impact ranges are found in Table 10.25 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10), and these are based on the worst-case (deepest) modelling location, which is the southwest location. The deepest modelling location (southwest) has consistently produced the largest SELcum impact ranges in previous modelling iterations for the Project. The worst-case Popper et al. (2014) derived SELcum impact ranges from the southwest location are precautionarily applied across the site. However, the greatest impact range considered for herring is the conservative 135dB SELSS threshold, applied specifically to temporary behavioural changes for spawning herring. This is the most relevant worst-case range for spawning herring and is displayed in Figure 10.6 (Document Reference 5.3.10) for all modelling locations. The position of the 135dB SELSS contours in relation to IoM spawning grounds (as defined by Coull et al., 1998) and a heatmap of herring larvae

Unique Reference Identifier	Consultation response received	Applicant response
		produced with recent NINEL herring larvae data, gives a more complete picture of the potential for behavioural impacts on spawning herring. Based on Figure 10.6, there is no overlap with the historical spawning grounds from the Project-alone impacts.
MO_014_021_3005 23	5.11. The MMO note in Table 4-6 of the Underwater Noise Assessment (Appendix 11.1 B) that a maximum impact range of 49km is predicted from the northwest location of the OWF. The MMO note the report must clarify which of the maximum impact ranges (47.2km or 49km) is correct for herring as a stationary receptor, for the monopile worst case scenario. There seems to be some discrepancies in the report and an accurate prediction is essential for assessing the potential impacts to Isle of Man herring.	Due to A) Changes in the potential hammer models to be used for the Project; and B) Refinements of the windfarm site, updated noise modelling has been undertaken for a maximum hammer energy of 6,600kJ. For clarity, the worst-case impact range for spawning herring arises from the 135dB SELSS behavioural disturbance threshold. This is an instantaneous effect, so remains the same, regardless of assumptions around stationary or fleeing receptors. This impact range is displayed for all modelling locations in relation to Isle of Man spawning grounds (as defined by Coull et al., 1998) and a heatmap of herring larvae produced with recent NINEL herring larvae data in Figure 10.6. This gives a more complete picture of the potential for behavioural impacts on spawning herring. Based on Figure 10.6 (Document Reference 5.3.10) there is no overlap with the historical spawning grounds (Coull et al., 1998) from the Project-alone, but there may be potential for the Project to contribute to a behavioural effect on spawning herring if other projects in the Irish Sea pile simultaneously, as discussed in Section 10.7 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10).
MO_014_022_3005 23	Minor Comments 5.12. In Table 10.16 the conservation status of Atlantic salmon is listed as 'Least Concern' based on the International Union for Conservation of Nature (IUCN) red list. However, the IUCN's most recent assessment for Atlantic salmon in European waters classifies the species as 'Vulnerable'. Please can this be updated in accordance with the most recent IUCN red list.	The Applicant notes your response. Table 10.16 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10) has been updated. This is not considered to affect the outcome of the assessment.
MO_014_023_3005 23	5.13. Section 10.5.4 states that "herring larvae are pelagic" and drift in ocean currents. The MMO do not consider this entirely correct. Newly hatched herring larvae are dependent on reserves in the yolk sac and as a result stay on the seabed for a period between 3 and 20 days until the yolk is absorbed. The yolk sac absorption rate is dependent on sea temperature (Russell, 1976). Once the yolk sac is absorbed, the larvae then become pelagic.	The Applicant notes your response. Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10) has been amended, but this is not considered to affect the outcome of the assessment.
MO_014_024_3005 23	In Section 10.5.4 it states that "no sandeel were recorded in any of the 50 grab sample locations across the windfarm site". It should be noted that a sediment grab is not a suitable method of catching sandeels. As such, an absence of sandeels in grab samples does not mean that the species is absent from the area.	The Applicant notes your response. Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10) has been amended, and site-specific PSA data has been used to characterise sandeel habitat suitability. The Applicant acknowledges the MMO's position on the use of Ground Fish Trawl Surveys, and this is no longer referred to in Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology. The baseline environment section for sandeel (Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology) now relies on recent site-specific PSA data collected for the Project, together with BGS data to inform the sandeel habitat suitability baseline.
MO_014_025_3005 23	5.15. Section 10.5.4 refers to data from the annual Northern Irish Ground Fish Trawl Surveys to highlight that surveys "carried out between 2000 and 2017 contained just 311 records of sandeel spp. In	The Applicant notes your response. Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10) has been amended, and site-specific PSA data has been used to characterise sandeel habitat suitability. The Applicant acknowledges

Unique Reference Identifier	Consultation response received	Applicant response
	<p>the Irish sea and St George’s Channel”. Trawl surveys aren’t an appropriate method to target sandeels as they only target demersal species that live or feed on or near the bottom of the seabed. Trawl methods such as otter and beam trawls don’t penetrate deep enough into the sediment to target burrowing sandeels. Additionally, the mesh size used in these surveys is often larger than the size of sandeels, meaning its likely many sandeels wouldn’t reach the end of the net. A sandeel dredge would be required, to provide appropriate abundance data.</p>	<p>the MMO’s position on the use of Ground Fish Trawl Surveys, and this is no longer referred to in Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology. The baseline environment section for sandeel (Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology) now relies on recent site-specific PSA data collected for the Project, together with BGS data to inform the sandeel habitat suitability baseline.</p>
<p>MO_014_026_3005 23</p>	<p>5.16. There are some inaccuracies in the referencing and referring of different sections and tables throughout the report. For example, in point 10.103 of Chapter 10 - Fish and Shellfish Ecology, the report refers to Section 10.5.6 (Pelagic Fish) in relation to Annex II species that pass-through rivers and estuaries, when in fact they should have referred to Section 10.5.6 (Diadromous Fish).</p>	<p>The Applicant notes your response. Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10) has been amended to correctly refer to Section 10.5.8 (Diadromous Fish).</p>
<p>MO_014_027_3005 23</p>	<p>5.17. The MMO note that the report does not include the River Ehen SAC and River Eden SAC in Section 10.5.10. The rationale for this is due to both sites being located to the north of the project area, and that fish receptors are “recorded as travelling north when moving from rivers into the sea”. At present this statement is unsupported within the HRA report and the potential effects to diadromous fish travelling from the south has not been considered. Statements on the directional movements of migratory fishes must be supported with data or References to determine which receptors are screened in/out of further assessment. This is particularly important as the River Ehen SAC is designated for Atlantic salmon (<i>Salmo salar</i>) which have medium-sensitivity to UWN (Popper et al., 2014). Similarly, the River Eden SAC is designated for brook lamprey (<i>Lampetra planeri</i>), river lamprey (<i>Lampetra fluviatilis</i>), and sea lamprey (<i>Petromyzon marinus</i>), which are benthic spawners and known to construct nests along riverbeds. As such, these receptors are vulnerable to UWN and vibration associated with pile driving activities. The MMO considers that the River Ehen SAC and River Eden SAC should not be scoped out of the HRA.</p>	<p>To clarify, it is only Atlantic salmon smolt that are recorded as travelling northwards in the Irish Sea as they leave river systems from both Northern Irish and English Rivers, as outlined in Barry et al., (2020) and Green et al., (2022). This is consistent with the fact that UK salmon are known to migrate to Norwegian feeding grounds (Malcolm et al., 2010). Since PEIR, more recent evidence shows a strong preference for Irish Sea smolts to migrate in a north westerly direction, out of the Irish Sea to the North East Atlantic, after exiting their natal rivers (Lilly et al., 2023). This evidence is presented in Section 10.5.8 of Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). The River Eden SAC is located more than 50km away from the Project (straight line distance) and over 100km via sea to the estuary (through the Solway Firth) and is therefore beyond the Zone of Influence (Zoi) for worst-case noise impacts to interfere with spawning lamprey species, which spawn on the riverbed, as noted by the MMO. The Applicant therefore considers there to be no potential for noise to impact lamprey during spawning at the River Eden. Lamprey species (outside of designated sites) are assessed in this ES as a receptor (see Section 10.5.8 in Chapter 10 Fish and Shellfish Ecology) and impact assessments on diadromous fish thereafter. On a precautionary basis the River Ehen and River Eden are considered in this EIA chapter and within the RIAA provided with the DCO application.</p>
<p>MO_014_028_3005 23</p>	<p>5.18. The report has appropriately assessed the impacts of EMF on shellfish. The MMO notes the report states it is unclear what impact EMF will have on brown crab. The MMO recommend applying the paper published by Scott et al. (2021) on the effects of EMF exposure on Edible crab (<i>Cancer pagarus</i>).</p>	<p>Scott et al. (2021) is now considered in Section 10.6.3.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10), to further inform the assessment for edible crab (also known as brown crab).</p>
<p>MO_014_029_3005 23</p>	<p>5.19. There is a high value and quantity of queen scallop (<i>Aequipecten opercularis</i>) in the wider area. Annual assessments of queen scallops are undertaken in territorial waters by the Isle of Man Government and Agri-Food and Biosciences Institute (AFBI), with occasional work undertaken by Bangor university for Welsh waters. The MMO considers</p>	<p>The high quantity of queen scallop in the study area is reflected in Paragraphs 10.67, 10.68 and in Table 10.11 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10), which shows queen scallop to be an abundant and valuable commercial shellfish species in the study area. The latest Isle of Man (Bloor et al., 2022) and Welsh (Delargy et al., 2019) queen scallop stock assessments have been consulted to bolster the baseline in Section 10.5.2 in Chapter 10 Fish and Shellfish</p>

Unique Reference Identifier	Consultation response received	Applicant response
	further data analysis necessary, outlining their coverage, abundance and any potential impacts.	Ecology. Local landings data for the Study Area provides the most relevant data for the Project. Impacts on queen scallops, along with other bivalves, are assessed in relevant 'Mollusc' sections throughout Section 10.6, and cumulatively in Section 10.7.3.2 in Chapter 10 Fish and Shellfish Ecology.
MO_014_030_3005 23	Chapter 11: Marine Mammals Major Comments 6.1. Table 11.2 (Chapter 11) states that “sensitivity testing has also been completed at 6,600kJ in the event this technology can be utilised”. If, in the future, the project wanted to use a higher hammer energy, additional assessment and consideration would be required. The maximum hammer energy modelled is 5,000 kJ and therefore anything above this has not been fully considered.	The assessment in the Environmental Statement has been updated for confirmed worst case hammer energy (6,600kJ) and is presented in Table 11.2 in Chapter 11 Marine Mammals (Document Reference 5.1.11).
MO_014_031_3005 23	6.2. Section 11.284 (Chapter 10) states that “to estimate the number of animals disturbed by piling, SELss contours a 5 dB increments (generated by the noise modelling – see Appendix 11.1) were overlain on the relevant species density surfaces to quantify the number of animals receiving each SELss, and, subsequently, the number of animals likely to be disturbed, based on the corresponding dose-response curve”. However, the MMO is unable to find modelling of the SELss contours in 5 dB increments within Appendix 11.1.	Further information on the dose-response assessment has been presented in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.2. Figures showing the SELss contours in 5 dB increments have been presented.
MO_014_032_3005 23	6.3. The MMO considers that the statement “It is important to note that, PTS is unlikely to occur in marine mammals, as the modelling indicates that the marine mammal would have to remain within less than 100m, for 24 hours, for any potential risk of PTS” has been misapplied. The modelling is based on a fleeing receptor and therefore, the receptor is at risk if they are within 100m of the vessel when they start to move away. Minor Comments 6.4. The seabed sediment parameters used in the modelling are not disclosed in the assessment. The MMO notes the parameters reasonably match the Subacoustech predictions for marine mammals and fish, based on the modelling assumptions provided in the report, such as the source levels, piling profiles and marine mammal fleeing speeds, while assuming sediment acoustical properties in between those typical for a sandy and a muddy seabed, respectively (i.e., less favourable to sound propagation than those of a sandy-type seabed). The MMO would expect notably larger effect ranges if sand was assumed to be the primary sediment type.	It has been acknowledged that marine mammals that were within 100m when piling begins would be at risk of PTS. However, given the mitigation that would be applied (e.g. pre-watches over the mitigation zone) it is considered to be highly unlikely that marine mammals would be present within their PTS range prior to the start of piling. Subacoustech modelling has been used for prediction of underwater noise propagation around the UK and to date presented good agreement with field measurements at the time of foundation installation. The model has been refined over 10 years using hundreds of datasets from field studies. It has also been noted that precaution has been built into the modelling, given that modelling has been undertaken considering the conservative maximum design scenario and modelling has been undertaken with no mitigation.
MO_014_033_3005 23	7. Appendix 11.1: Underwater Noise Assessment Major Comments 7.1. In Appendix B of Appendix 11.1, the Applicant has carried out further modelling for monopiling with a higher hammer energy of 6,500kJ, on the basis that new hammer technology may become available for use when installing monopile foundations at Morecambe OWF. In Table A15 it shows the maximum impact range for herring, modelled as a stationary receptor, for the southwest location to be	The single strike 135dB SEL threshold for disturbance of herring has been modelled at a 6,600kJ hammer energy at all locations including the northwest location.

Unique Reference Identifier	Consultation response received	Applicant response
	48km. As stated above, regarding the impacts to Isle of Man herring, modelling the impact range from a northwest piling location is the most appropriate for a worst-case scenario assessment. To further this point, in Section 4.1 in Appendix B of Appendix 11.1, it shows the north west location to have a greater maximum impact range than the southwest location, therefore modelling from the northwest location will be necessary before any conclusions can be drawn from the modelled results.	
MO_014_034_3005 23	7.2. Section 1.80 (Appendix 11.1) states that “although noise levels lower than TTS thresholds may startle the individual, this has no lasting effect” however this has not been supported by evidence. Additionally, the MMO considers TTS thresholds inappropriate for unexploded ordnance (UXO) disturbance, and recommends the use of Effective Deterrent Radius (EDRs).	Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment (Document Reference 5.2.11.3) assessed potential disturbance through the use of EDRs and the potential effects of TTS. EDRs are also used in the Draft Marine Mammals Mitigation Protocol (Document Reference 6.5) to assess potential impacts of UXO.
MO_014_035_3005 23	7.3. Section 1.84 (Appendix 11.1) states that “as a precautionary approach, it has been assumed that there could be an estimated worst-case of 5km disturbance range for low order clearance” however this has not been supported by evidence.	A 5km disturbance range was listed in the most recent JNCC guidance[1]. Further information has been presented in Appendix 11.3 Marine Mammal Unexploded Ordnance Assessment (Document Reference 5.2.11.3). [1] JNCC (2023) Marine Noise Registry Help and Guidance – Annex 1. Available at https://mnr.jncc.gov.uk/assets/mnr/Documents/marine_noise_registry_helpguide_2023.pdf
MO_014_036_3005 23	Minor Comments 7.4. Figure 3-1 (Appendix 11.1) shows a comparison between example measured impact piling data and modelled data. The pile sizes used in this comparison are much smaller than the proposed 14m diameter for Morecambe OWF. The MMO also recommends providing the hammer energies, alongside pile diameter, as they may vary from the proposed hammer energies being used on the Morecambe OWF. Further evidence is also required in terms of the SELs and not just the peak sound pressure level (SPL _{peak}).	Equivalent validation charts have been added that include SEL results in Appendix 11.1 Underwater Noise Assessment (Document Reference 5.2.11.1)
MO_014_037_3005 23	7.5. Section 3.1.1 (Appendix 11.1) states that the “measurements taken during installation will be constrained by the piling plan and site limitations and a direct comparison with a modelled scenario is unlikely to be possible”, however even if the piling locations and choice of transects would not be matched precisely, both modelling and monitoring should provide enough information to deduce some envelope of received level curves in each case. The MMO recommends providing some sort of comparison for comparable hammer strike energies, with the associated envelopes of variability.	The modelled noise levels present at 750m from the pile have assisted with this, and these have been added in Appendix 11.1 Underwater Noise Assessment (Document Reference 5.2.11.1). A note of caution here has been added but it should be remembered that although a suitable ramp up and soft start has been included, there will always be variations on site. A draft Deemed Marine Licence (DML) (schedule 6 within the Draft DCO (Document Reference 3.1)) will also have provisions to monitor underwater noise for the first four piles of each type i.e. pin piles and monopiles. Comparisons with modelled data would be provided in the underwater noise report, to be submitted to the MMO within six weeks following the end of piling for the first four piles.

Unique Reference Identifier	Consultation response received	Applicant response
MO_014_038_3005 23	7.6. The MMO notes that the assessment of the cumulative sound exposure (Appendix 11.1), a fleeing animal receptor has been assumed for marine mammals, with 'fleeing' speeds of 3.25 m/s (metres per second_ for low-frequency cetaceans and 1.5 m/s for all other receptors. For fish receptors, both a fleeing and stationary animal model has been assumed. The MMO is not aware of empirical evidence to support fleeing in fish, and therefore the predictions based on a stationary receptor will be the most appropriate/relevant. Fleeing assumptions can have a significant effect on the assessment outcomes. For example, as per Section 4.1 of the report, the largest recoverable injury ranges (203dB SELcum threshold) for monopiles are predicted to be 6.7km assuming a stationary fish receptor. If a fleeing fish receptor is assumed, the impact ranges are reduced to less than 100m at the SW modelling location. Maximum Temporary Threshold Shift (TTS) ranges are predicted up to 24km for a stationary animal, reducing to 13km for a fleeing receptor.	While fleeing and stationary values are presented, stationary results are used within the fish assessments. Further information can be found in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10).
MO_014_039_3005 23	7.7. In paragraph 1.128 of the MCZ Assessment there is References to the quantitative thresholds for behaviour provided in Popper et al. (2014), please note, this report does not provide quantitative thresholds for behaviour. For fish with swim bladder not involved in hearing, the maximum TTS range is 31km (please note, TTS is not the same as disturbance). Using TTS as a proxy for disturbance, can underestimate the potential risk.	The wording in the MCZ Assessment has been updated. In the absence of quantitative thresholds TTS remains a useful indicator of likely disturbance ranges.
MO_014_040_3005 23	7.8. Para 62 of the MCZ Assessment states that the Project found a worst-case behavioural disturbance of 49km for herring (assuming a 135 dB threshold). Please note, if relying on this distance, it is important to remember that behaviour is instantaneous and therefore there can be no stationary/fleeing assumptions.	No stationary/fleeing assumptions have been used in the assessment for behaviour disturbance to herring.
MO_014_041_3005 23	Chapter 13: Commercial Fisheries8.1. Table 13.2 (Chapter 13) demonstrates that once construction commences and even during the operational phase, many fishing vessels will be excluded from fishing within the windfarm site, even if it is deemed acceptable by the operator. The MMO recommend this be taken into account when considerations are made for the Fisheries Liaison and Coexistence Plan and justifiable disturbance payments.	The Outline Fisheries Liaison and Co-Existence Plan (Document Reference 6.3), submitted with the DCO application, includes the process for justifiable disturbance payments, subject to the provision of suitable evidence as within Fishing Liaison with Offshore Wind and Wet Renewables Group (FLOWW) guidance.
MO_014_042_3005 23	8.2. Section 3.242 (Chapter 13) evidences that significant mitigation and liaison will be required to offset the impacts of spatial squeeze on commercial fishing industry. The relative contribution of this project towards the cumulative effect has been assessed as low, however the impact from all impacting projects must be taken into consideration, to ensure the viability of the fishing fleet in the Eastern Irish Sea.	The Cumulative Effects Assessment (CEA) is presented in Section 13.7 in Chapter 13 Commercial Fisheries (Document Reference 5.1.13). The CEA concluded significant effects in relation to loss of or restricted access to fishing grounds; displacement of fishing vessels and effect on the commercial species resource. It is recognised that the Project has a low contribution to this overall cumulative effect. The Applicant has committed to the development of and adherence to a Fisheries Liaison and Co-Existence Plan (FLCP), in accordance with the Outline FLCP (Document Reference

Unique Reference Identifier	Consultation response received	Applicant response
		6.3), that provides the mechanism for the involvement in a potential regional commercial fisheries working group.
MO_014_043_3005 23	8.3. Commercial fishing activity should be considered in conjunction with the cumulative effects on commercial shipping routes as spatial squeeze will bring higher likelihood of cross industry conflict in terms of access and potential gear conflicts in areas surrounding the windfarm site. Gear conflicts between differing types of fishing vessels may also increase, due to fishing grounds being diminished by windfarm projects and associated diverted commercial traffic	Chapter 13 Commercial Fisheries (Document Reference 5.1.13) assesses: -Displacement leading to gear conflict and increased fishing pressure on adjacent grounds -Increased vessel traffic associated with the Project within fishing grounds leading to interference with fishing activity A regional Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2) has been undertaken to consider cumulative effects to shipping and navigation, inclusive of fishing vessels.
MO_014_044_3005 23	General Comments Major Comments 9.1. The MMO note that during the decommissioning methodology, it is said that the wind turbines will be cut below seabed level. As this plan involves leaving infrastructure in place, impacts should be assessed for post-decommissioning. This is because any infrastructure will remain a hazard to navigation and fishing gear, preventing future fishing activity in the area, beyond the lifespan of the windfarm	Potential impacts during the decommissioning phase are assessed within Section 13.6 in Chapter 13 Commercial Fisheries (Document Reference 5.1.13), including consideration of gear snagging associated with Project infrastructure left in situ.
MO_014_045_3005 23	9.2. Section 4.13 says that Dogger Bank and Southern North Sea regions were scoped out –but then Dogger Bank is listed in the remaining options in 4.14. This may be a minor error and ‘scoped out’ was meant to say ‘scoped in’.	The Applicant notes your response and confirms that Dogger Bank was scoped out from the Project’s site selection process. This has been updated in Chapter 4 Site Selection and Assessment of Alternative (Document Reference 5.1.4).
MO_014_046_3005 23	9.3. The resolution is poor on several plates. For example, the arrows are not discernible on Plate 7.4 and the colour definition is lost on Plate 7.9.9.4. Please note that Section 7.68, regarding geomorphic areas, would benefit from References to appropriate figures, such as Figure 7.6.	The resolution of the original figures from which the plates were derived is poor. The plates have therefore been removed but still used as part of the assessment. The current directions are still described in Section 7.5.4 of Chapter 7 Marine Geology, Oceanography and Physical Processes (Document Reference 5.1.7). Reference has been added to Figure 7.2 in Paragraph 7.118 in Chapter 7 Marine Geology, Oceanography and Physical Processes (previously Paragraph 7.68).
MO_014_047_3005 23	Conclusion The MMO welcomes the progress Flotation Energy has made to date to assess the environmental impacts of the Morecambe Offshore Wind Farm (Generation Assets) project. However, the MMO requires the points raised in this response to be addressed within the ES.	The Applicant notes your response.
MOR_015_001_310 523	Section 42 of the Planning Act 2008 - Preliminary Environment Information Report Morecambe Offshore Wind Farm Generation Assets. Thank you for your email dated 19th April 2023 inviting comments on the Preliminary Environment Information Report (PEIR) for the proposal to construct and operate Morecambe Offshore Wind Farm generation assets. The MCA’s remit for offshore renewable energy development is to ensure	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>that safety of navigation is preserved, as progress is made towards government targets for renewable energy. This response is focused on the shipping and navigation elements of the PEIR and will form the basis of our response to the Environmental Impact Assessment Report in due course. Navigation Risk Assessment (NRA) – General Comments</p>	
MO_015_002_3105 23	<p>We note in Chapter 3.4.2 that two 14-day traffic surveys (radar, AIS and visual) were completed in February 2022 and July to August 2022, which meets the required survey guidelines in MGN 654. This is supported by 2019 AIS data from Marine Traffic, 2019 MCA AIS data published by the MMO, recreational and fishing VMS data. Navigation simulations were conducted with the ferry operators followed by a Hazard Identification (HAZID) workshop in October 2022 where several concerns were raised by MCA and navigation stakeholders on the unacceptable collision risks, including cumulative risks. It is understood that since the HAZID workshop amendments have been made to the wind farm boundary and that further traffic surveys and navigation simulations will be completed, followed by an additional HAZID workshop. We expect the NRA to be updated with the additional data incorporated and MCA will provide further comments once completed. A completed MGN654 checklist has been provided in Appendix A. We are content at this stage with regards to the process you have undertaken so far in order to comply with MGN 654 and its annexes, and we welcome the work to be undertaken for addressing the guidance and recommendations in the future.</p>	<p>The Applicant notes your response. The updated Navigation Risk Assessment (NRA) and Cumulative Regional Navigation Risk Assessment (CRNRA) which consider the revised Project windfarm site boundary and summarises the additional surveys, Navigation simulations and hazard workshops undertaken in consultation with the MCA are presented in Appendix 14.1 (Document Reference 5.2.14.1) and Appendix 14.2 (5.2.14.2). respectively.</p>
MO_015_003_3105 23	<p>Layout The turbine layout design will require MCA agreement prior to construction to minimise the risks to surface vessels, including rescue boats, and Search and Rescue aircraft operating within the site. As such, MCA will seek to ensure all structures are aligned in straight rows and columns, including any platforms. Any additional navigation safety and/or Search and Rescue requirements, as per MGN 654 Annex 5, will be agreed at the approval stage. Appendix 14.2 Cumulative Regional Navigation Risk Assessment</p>	<p>The development of the site layout for the Project remains ongoing. The site layout plan would be submitted to the MMO for approval under a condition of the Deemed Marine Licence. The Applicant would also engage with the MCA and Trinity House as appropriate. The final site layout would be agreed post consent and prior to construction. Since the publication of the Preliminary Environmental Information Report (PEIR), the Applicant has committed to two-lines of orientation within the windfarm site to support navigation safety and search and rescue requirements.</p>
MO_015_004_3105 23	<p>MCA is concerned at this stage on the cumulative impacts of the proposed Mona, Morgan and Morecambe wind farm projects to the safety of navigation in the area, specifically on the reduction of safe navigable sea space and increased collision risk. The traffic density is significant within the area with strategically important passenger and cargo routes between the UK, Isle of Man, Northern Ireland and the Republic of Ireland. The current boundaries of all three wind farms cumulatively pose unacceptable risks to navigation for these passenger and cargo routes.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MO_015_005_3105 23	<p>Hydrographic Survey Data MGN 654 Annex 4 requires that hydrographic surveys should fulfil the requirements of the International Hydrographic Organisation (IHO) Order 1a standard, with the final data supplied as a digital full density data set, and survey report to the MCA Hydrography Manager. This information will need to be submitted, ideally at the EIA Report stage.</p>	<p>The requirement to undertake hydrographic surveys pre and post construction are captured in the draft Development Consent Order (DCO) (Document Reference 3.1).</p>
MO_015_006_3105 23	<p>Safety Zones Safety zones during the construction, maintenance and decommissioning phases are supported, however it should be noted that operational safety zones may have a maximum 50m radius from the individual turbines. 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.</p>	<p>During operation and maintenance activities, the Applicant would seek to agree appropriate safety zones around the Wind Turbine Generators (WTGs) and work areas to be applied. Whilst the safety zones would be permitted by the Secretary of State, this would be in consultation with relevant stakeholders, including the Maritime and Coastguard Agency.</p>
MO_015_007_3105 23	<p>Emergency Response An Emergency Response Cooperation Plan is required to meet the requirements of MGN 654 Annex 5 and will need to be in place prior to construction. The ERCoP is an active operational Document and must remain current at all stages of the project including during construction, operations & maintenance and decommissioning. A SAR checklist will be discussed as the project progresses to track all requirements detailed in MGN 654 Annex 5.</p>	<p>The requirement to produce an ERCoP and SAR checklist, in consultation with the MCA, is secured within the Deemed Marine Licence (presented within the Draft DCO) under the Offshore Safety Management clause. Further information can be found in the Schedule of Mitigation (Document Reference 5.5).</p>
MO_015_008_3105 23	<p>Conclusion The comments detailed above are considered appropriate and necessary for the safety of navigation and Search and Rescue purposes. We hope you find them useful at this stage and MCA are happy to discuss further as the project progresses.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_016_001_300 523	Recently I asked if you could inform Fylde council by a presentation at the town hall at St Anne's, for which I have had no reply.	Following further engagement, the consultees interest lies with the Morgan and Morecambe Offshore Wind Farms: Transmission Assets Project. The Applicant has no further comment.
MOR_017_001_300 523	I write as someone who is very much in favour of offshore wind power and see obvious benefits in exploiting the Irish sea for this purpose. However, I cannot stress too much the importance of maintaining a direct navigable sea lane between Douglas and Heysham and Douglas and Liverpool. These two ports are effectively the Island's lifeline, carrying not only passengers but the essential freight that allows the Isle of Man to function. An adverse impact on these sea lanes would be catastrophic for our island. A diversion around a windfarm will add significant extra cost and environmental damage from fuel consumption, even with the latest ship in our fleet. If we were talking about an onshore development, I would argue that the Isle of Man - Liverpool route has been in continuous use by the Steam Packet since 1830 and they would be able to claim a right of way over the route. Sadly, this principle does not seem to be enshrined in marine consenting. It is essential that the Isle of Man has access to a direct, navigable sea lane with sufficient width to accommodate challenging wind, tide and fog conditions without undermining vessel safety.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_018_001_300 523	The North West Wildlife Trusts (Cumbria, Lancashire and Cheshire) response to the Morecambe formal Consultation on the Preliminary Environmental Information Report (PEIR). Thank you for consulting on the PEIR for the Morecambe Offshore Wind Farm (OWF). This is a response from The North West Wildlife Trusts (NWWT), covering Cumbria WT, Lancashire WT and Cheshire WT. TWT are a movement of 46 independent Wildlife Trusts (including NWWT) covering the UK, the Isle of Man and Alderney, and are the largest UK voluntary organisation dedicated to conserving all the UK's habitats and species, whether in the countryside, towns or at sea. We improve places for wildlife and strengthen the relationship between people and the natural environment. Our aim is to protect and create resilient ecosystems on land and in the sea. Our general comments can be found in Annex 1 and comments on the offshore environment can be found in Annex 2. Please do not hesitate to contact us if you would like to discuss any of the comments included in our response. We look forward to continuing to engage on this project as it develops.	The Applicant notes your response

Unique Reference Identifier	Consultation response received	Applicant response
MO_018_002_3005 23	<p>Annex 1: General comments</p> <p>Our position on offshore wind development. We support action to tackle climate change and recognise the serious threat to nature if action is not taken. However, we also face an ecological emergency with 41% of species in decline in the UK.1. There is an inextricable link between the climate and nature crises, which means efforts to solve one crisis will be futile if they do not also address the other. Consequently, fulfilling UK ambitions for energy infrastructure as a major decarbonisation pathway to limit climate change will fail if they do not achieve environmental protection, recovery, and enhancement of marine and onshore habitats, species, and carbon stores. The scale of OWF planned in the Irish Sea make makes it one of the most significant activities with the potential to impact on wildlife and ecology in our coastal waters and the wider Irish Sea, arguably second only to fishing. To realise the potential contribution of OWF to decarbonising the energy sector and helping to mitigate the worst impacts of climate change on society and nature, it must protect and support nature’s recovery on land and at sea.</p>	<p>The Applicant notes your response. Potential effects have been assessed and proposed mitigation is presented in each chapter of the Environmental Statement. Proposed mitigation is also presented within the Schedule of Mitigation (Document Reference 5.5).</p>
MO_018_003_3005 23	<p>Strategic coordination of energy generation and transmission infrastructure</p> <p>The Wildlife Trusts (TWT), of which the NWWTs are members, have long advocated for greater strategic coordination in the planning, design, and delivery of offshore electricity generation together with the offshore and onshore electricity transmission infrastructure needed to distribute electricity generated offshore to where it is needed, to reduce environmental and consenting risks. To this end TWT is represented on the Offshore Transmission Network Review (OTNR) Expert Advisory Group and participates in strategic forums such as the Offshore Wind Evidence and Change (OWEC) Programme. We therefore welcome that the Morecambe and Morgan OWF have been scoped into the Pathways to 2030 Workstream under the OTNR and will therefore share transmission assets.</p>	<p>The Applicant notes your response.</p> <p>A separate consent for the Transmission Assets associated with the Morecambe Offshore Windfarm and the Morgan Offshore Wind Project (Morgan and Morecambe Offshore Wind Farms: Transmission Assets will be sought.</p>
MO_018_004_3005 23	<p>Strategic compensation and enhancement</p> <p>One opportunity of strategically planned offshore energy generation and electricity transmission infrastructure (including onshore elements) is for strategic approaches to compensating for residual environmental impacts that cannot be avoided or adequately mitigated. There is significant potential for such measures to have a greater overall positive impact on the environment and biodiversity and take compensation beyond the level of no net loss into achieving net positive effects. Whilst we recognise that Biodiversity Net Gain policies and delivery frameworks are more developed for terrestrial and intertidal habitats than they are for the marine environment, we would still expect</p>	<p>The Applicant has produced an Environmental Benefits and Net Gain Statement (Document Reference 4.4) as part of the DCO Application.</p> <p>Once the Marine Recovery Fund has been established by the UK Government, the Applicant has kept open the option to contribute to strategic compensation as part of the ‘Without Prejudice Compensation case’, if required.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Morecambe OWF to aim to achieve an overall net positive impact on biodiversity and ecology in the marine environment. We ask that the Morecambe offshore wind farm development commit to achieving net positive impacts on biodiversity and ecology in the marine environment and to seek to engage with relevant stakeholders to achieve that goal.</p>	
<p>MO_018_005_3005 23</p>	<p>Potential for cable corridor mitigation and enhancement for benthic habitats</p> <p>TWT has dedicated extensive resource to the exploration of benthic compensation. This effort has led to the conclusion that benthic compensation and Measures of Equivalent Environmental Benefit (MEEB) are incredibly difficult to deliver in the marine environment, causing unnecessary costs and delays for OWF projects. It is therefore recommended that cables and array areas avoid benthic MPAs. There is an indication though that the design, construction, and management of cable corridors can serve to mitigate the need for benthic compensation, and potentially even serve as compensation themselves by enhancing and improving the condition of these habitats. For example, by excluding activities that could damage surface laid cables, such as demersal fishing and anchoring, impacts on benthic habitats within cable corridors could be drastically reduced or even removed entirely, enabling them to recover to more favourable condition. Further, excluding activities that could damage surface laid cables would preclude the need for cable protection, eliminating the need for benthic compensation and saving on costs for developers and ultimately the consumer – which should be an even higher priority considering the current energy cost crisis.</p>	<p>There is no overlap between the Project and any benthic Marine Protected Areas. This comment is noted; however, exclusion zones around cable corridors are not being proposed.</p>
<p>MOR_018_006_300 523</p>	<p>Cumulative impacts: Fishing</p> <p>There is no mention in the HRA Screening Report of fishing or fisheries as activities that have the potential for cumulative impacts on the marine environment and ecology in combination with the scheme. We consider that fishing should be included in both cumulative and in-combination assessments. Fishing is a licensable activity that has the potential to have an adverse impact on the marine environment. This is supported in the leading case C-127/02 Waddenzee [2004] ECR I-7405, the CJEU held at para. 6:</p> <p>'The act that the activity has been carried on periodically for several years on the site concerned and that a licence has to be obtained for it every year, each new issuance of which requires an assessment both of the possibility of carrying on that activity and the site where it may be carried on, does not itself constitute an obstacle to considering it, at the time of each application, as a distinct plan or project within the meaning of the Habitats Directive.'</p>	<p>As no evidence exists to support a position on what the future trends in fishing activity would look like across the wider region, the current assumption is that fishing would continue at a comparable intensity/rate and inclusion in the baseline is considered appropriate.</p> <p>This approach is in line with recent DCO precedent, including Awel y Môr and Hornsea Four Offshore Wind Farms. Should fishing practices materially change at a future date, it would be the responsibility of the competent authority, such as the MMO and IFCA, to review this in fishing licensing plans.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>This case law demonstrates that fishing is considered a plan or a project and therefore, not part of the baseline.</p> <p>Current Defra policy² is to ensure that all existing and potential fishing operations are managed in line with Article 6 of the Habitats Directive. The current, risk-based, 'revised approach' to fisheries management in UK national site network is a compromise agreed by all to prevent the closure of fisheries during assessment. This approach further supports the view that fishing is considered a plan or a project and therefore, must be included in the in-combination assessment in line with Article 6(3) of the Habitats Directive.</p> <p>A precedent was set for the inclusion of fishing in in-combination assessments when TWT began Judicial Review proceedings against the Department for Energy and Climate Change (DECC) in August 2015 against the approval of Dogger Bank Teesside A & B Offshore Wind Farm Order due to the exclusion of fishing from the in-combination assessment as part of the HRA. TWT withdrew the claim due to assurances given by the government regarding the management of fishing within Dogger Bank SAC. One of those assurances was that steps would be taken to ensure that this scenario would not happen again and that Defra and DECC, now known as BEIS, would work together to ensure fishing would be included in future offshore wind farm impact assessments.</p> <p>Our comments regarding the inclusion of fishing in cumulative and in-combination assessments are not specific to just marine mammals SACs. This principle should be applied to cumulative impact assessments for all Marine Protected Areas (MPAs).</p>	
MOR_018_007_300 523	<p>Designated sites</p> <p>Energy cables and infrastructure, placed in the wrong location, can cause habitat damage and loss. Several Marine Protected Areas (MPAs) are in unfavourable condition due to the impact of cabling infrastructure.³ We are pleased to see that the Morecambe OWF will not pass through any designations. However, please note that there is significant potential for this scheme to have adverse impacts outside of designated areas. We expect the EIA for the scheme to assess these and other potential impacts on marine ecology outside MPAs and propose suitable mitigation and compensation to achieve an overall benefit to these habitats and wider marine ecology from the scheme. Further, we expect designated sites that are close to the site to be fully considered, particularly those in Table 1.</p> <p>Table 1 Designated sites to be considered Site Designation and</p>	<p>The Applicant has assessed the designated sites listed and presented in the Report to Inform Appropriate Assessment (Document Reference 4.9) and the Marine Conservation Zone Assessment Report (Document Reference 4.12 and 4.13).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>distance North Anglesey Marine SAC Designated for Harbour Porpoise, 45km</p> <p>Pen Llyn a'r Sarnau SAC Designated for bottlenose dolphin, 110km Fylde MCZ Designated for area of subtidal sediment and associated flora/fauna, 8km</p> <p>West of Walney MCZ designated for area of subtidal sediment and associated flora/fauna and Seapen and burrowing megafauna FOCI, 13km</p> <p>Eastern part of Shell Flat and Lune Deep SAC Annex I sandbank Habitat, shell flat overlaps with the 15km Zol from the windfarm site</p> <p>Liverpool Bay SPA</p> <p>Abuts the eastern boundary of the windfarm site</p>	
<p>MOR_018_008_300 523</p>	<p>Noise mitigation</p> <p>We expect the assessment and proposed mitigation and management of underwater noise disturbance impacts on marine mammals during the construction, operation, and decommissioning of the proposed Morecambe OWF will be carried out in accordance with guidance or any future guidance that might supersede it. A significant number of high noise-generating activities will take place in the Irish Sea during the survey and construction period for Morecambe. Although there is currently no regulatory mechanism in place for managing the in-combination underwater noise impacts and the development will not need a Site Integrity Plan, it is vital that the applicant mitigates the noise impacts generated from the project, including through the use of noise abatement technology during construction where technically feasible.</p>	<p>The Applicant notes your response. Mitigations are outlined in Chapter 11 Marine Mammals (Document Reference 5.1.11), with a draft Marine Management Mitigation Protocol (Document Reference 6.5) provided with the DCO Application, should piling and/or UCO clearance works be required for the Project.</p>
<p>MOR_018_009_300 523</p>	<p>Ornithology</p> <p>Please note due to time restraints, we have not assessed the offshore ornithology section and echo all of RSPB comments. We look forward to viewing the updated assessment once the full 24 months of surveys have been undertaken. We expect that all impacts are minimised through the project design and best use of available technology e.g. minimum tip height of turbines to reduce impacts, minimising moving parts and/or the number of turbine blades, slower rotation speeds, and blunt edges on the structure, slow start procedures for turbines. Given the number of OWF being developed in the Irish Sea, we expect a full cumulative impact assessment to be undertaken, including consideration of transboundary impacts. Concerns are raised over the possible disturbance, displacement and barrier effects on sensitive receptors, particular black-backed gulls.</p>	<p>The Applicant notes your response. The air gap has been increased between PEIR and ES to reduce collision effects. The maximum number of wind turbine generators (WTGs) and the maximum tip height have also been reduced. Further design details are not fixed at this stage in the process but as the design develops the use of best available technology would be considered as appropriate. A full cumulative impact assessment has been undertaken in Section 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p> <p>Impacts on great black-backed gull and lesser black-backed gull have been fully considered in the ES and RIAA (Document Reference 4.9). It was noted that gull species have been considered primarily to be at risk of collision impacts but have low sensitivity to disturbance and displacement effects; therefore the assessment has been focussed on the former.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_018_010_300 523	We welcome that the Morecambe and Morgan OWF have been scoped into the Pathways to 2030 Workstream under the OTNR and will therefore share transmission assets. Please note that it is very difficult to assess the project in full without sight of the PIER for the transmission assets.	The DCO Application includes a summary Document that considers both the Generation Assets (the Project) and Transmission Assets (Document Reference 5.1.23), with a further combined assessment within the cumulative section of each of the respective ES chapters.
MOR_018_011_300 523	Table 9.2: CWT is concerned to note that the worse-case cumulative area of seabed disturbance is approximately 3.5km ² and that this is underplayed as a small area within the PEIR, and thus of small magnitude for impact assessment.	Since the publication of the Preliminary Environmental Information Report (PEIR), the maximum area of disturbance has been refined to approximately 2.4km ² (see Table 9.2 in Chapter 9 Benthic Ecology of the Environmental Statement (Document Reference 5.1.9) for details). Regardless, 'small' in the sense used in the PEIR (and this Environmental Statement) is relative; in this instance, the affected habitat types are ubiquitous across the wider study area (demonstrated in Section 9.5.4), in which context, 2.4km ² is a limited area of habitat for the purpose of defining magnitude of impact. If it represented 2.4km ² of a scarcer/more vulnerable habitat type, then the magnitude of impact would be greater. The Rochdale Envelope approach for offshore windfarm consents assesses worst-case scenarios of a Project Design Envelope. In reality the project footprint is likely to be smaller than the 2.4km ² assessed.
MOR_018_012_300 523	Table 9.11: We are pleased to see that the applicant will minimise the use of scour protection. The use of cable protection causes a loss of habitat for the lifetime of a project. Even at the time of decommissioning, it is uncertain whether cable protection can be fully removed and if habitat can recover following this.	The Applicant notes your response.
MOR_018_013_300 523	Table 9.11: We welcome that turbines and cables will be spaced to reduce EMF and thermal emissions as per industry standards, however very little is known about the effects and we ask that the applicant stays up to date with guidance as it develops. Several strategies could be used to mitigate the effects from EMF, and these should be considered in the design phase of projects. For example, shielding, burial, and bundling for out-of-phase cables (where the voltage and current peaks are out of phase) are recommended for all scales of project.	Wherever practicable, cables would be buried to a target depth of 1.5m. Where ground conditions do not allow burial, cable armour would be laid, all of which would reduce the impacts of EMF. Further detail on embedded measures to reduce the risk of EMF is presented in Table 9.3 in Chapter 9 Benthic Ecology (Document Reference 5.1.9).
MOR_018_014_300 523	Paragraph 9.124: Baseline conditions – we are concerned that the baseline conditions already represent a degraded state from its potential, given the 'shifting baseline syndrome'. ⁴ Therefore biodiversity net gain is essential to achieve through development.	Net gain requirements would be reviewed as legislation linked to the Biodiversity and Marine Net Gain is progressed. An Environmental Benefit and Net Gain Statement is provided (Document Reference 4.4) as part of the DCO Application. It is considered outside the scope of this ES to consider changes from pre-industrial baseline for impact assessment.
MOR_018_015_300 523	Table 9.22: We are disappointed that fishing has been considered as part of the baseline and has not been included in the CEA for fish and shellfish ecology. Fishing is a licensable activity that has the potential to have an adverse impact on the marine environment, including fish and shellfish.	As no evidence exists to support a position on what the future trends in fishing activity would look like across the wider region, the current assumption is that fishing would continue at a comparable intensity/rate and inclusion in the baseline is considered appropriate. This approach is in line with recent DCO precedent, including Awel y Môr and Hornsea Four Offshore Wind Farms. Should fishing practices materially change at a future date, it would be the responsibility of the competent authority, such as the MMO and IFCA, to review this in fishing licensing plans.

Unique Reference Identifier	Consultation response received	Applicant response
		Management plans are considered within the commercial fisheries cumulative assessment as relevant in Chapter 13 Commercial Fisheries (Document Reference 5.1.13).
MOR_018_016_300 523	Paragraph 9.156: We welcome that there is no spatial overlap between the windfarm site and the benthic nature conservation designations.	The Applicant notes your response.
MOR_018_017_300 523	Table 10.38: We are disappointed that fishing has been considered as part of the baseline and has not been included in the CEA for fish and shellfish ecology. Fishing is a licensable activity that has the potential to have an adverse impact on the marine environment, including fish and shellfish.	<p>As no evidence exists to support a position on what the future trends in fishing activity would look like across the wider region, the current assumption is that fishing would continue at a comparable intensity/rate and inclusion in the baseline is considered appropriate.</p> <p>This approach is in line with recent DCO precedent, including Awel y Môr and Hornsea Four Offshore Wind Farms. Should fishing practices materially change at a future date, it would be the responsibility of the competent authority, such as the MMO and IFCA, to review this in fishing licensing plans.</p> <p>Management plans are considered within the commercial fisheries cumulative assessment as relevant in Chapter 13 Commercial Fisheries (Document Reference 5.1.13).</p>
MOR_018_018_300 523	<p>Table 10.43: Construction impact 4. We welcome that the herring spawning grounds potential cumulative impact will be assessed further in the ES.</p> <p>Herring spawning grounds are an important area utilised by adult herring who spawn directly onto the seabed. Displacement due to noise during wind farm construction / decommissioning could have potentially serious population implications. Herring return to the same spawning site every year and expend a significant amount of energy reaching their destination. If noise restricts their access to these areas they may have no energy remaining to locate an alternative site and may 'abort' their eggs. This would have a substantial impact on the herring population and potentially an indirect effect on a wide range of other species as herring are an essential component of many food chains. We would recommend considering further mitigation measures to be put in place.</p> <p>Both species of shad have been omitted from the HRA despite presence in the region.</p>	<p>As agreed in the Expert Topic Group (ETG) meeting on 11 October 2023, herring spawning habitat heatmapping, using NIHLs data from the previous 10 years, has been undertaken and is presented in Section 10.5.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). The heatmap is overlaid with noise contours in Figure 10.6 (Document Reference 5.3.10).</p> <p>This shows that there is no direct overlap in the worst-case temporary behavioural impact range derived from Hawkins et al., (2014), with either the historical or likely present day spawning ground at the Isle of Man. However, an assessment on herring spawning is made, noting the proximity and limitations of the definition of spawning ground in Section 10.6.2.4.</p>
MOR_018_019_300 523	Table 11.1: Both species of shad have been omitted from the HRA despite presence in the region.	Whilst shad are present in the region, there is no SAC designated for shad within 100km of the Project, thereby ruling out direct effects on these sites. All worst-case noise impact ranges for fish species are contained within 50km, so there is no pathway for direct impact on SACs designated for shad species. Whilst adult non-spawning shad may be present at the site, there is no way to apportion individuals to any one SAC river population (or non-designated population). However, shad species are now considered in this ES and the RIAA (Document Reference 4.9) as part of the

Unique Reference Identifier	Consultation response received	Applicant response
		diadromous fish assemblage (Section 10.5.8 of Chapter 10 Fish and Shellfish (Document Reference 5.1.10)).
MOR_018_020_300 523	Table 11.1: NE recommended scoping in several marine mammals that are present in the wider Irish Sea study area e.g. short-beaked common dolphin, but this has not been done	Common dolphin were screened in and assessed in Chapter 11 Marine Mammals with baseline information in Section 5.3 of Appendix 11.2, which list species included in the assessment and discussed as part of the Evidence Plan Process (EPP).
MOR_018_021_300 523	11.651: Cumulative effects due to operational and decommissioning impacts have been screened out of assessment however given the scale of OWF in the Irish Sea and the proximity of Wales, we believe cumulative impacts must be scoped back in.	After reviewing the offshore wind farms (OWFs) in the CIS MU that have become operational after the baseline surveys started in March 2021, prior to construction at the Project, an assessment for cumulative effects of operational wind turbines has been included (Chapter 11 Marine Mammals, Section 11.7 (Document Reference 5.1.11)), which was not significant given the impact ranges during operation (below <100m TTS and PTS for the Project). There are great uncertainties with regard to project timelines for the decommissioning programmes for OWFs and any impacts will have to be assessed prior to any decommissioning activities. Therefore, this impact remained screened out of the Cumulative Effects Assessment.
MOR_018_022_300 523	11.407: Potential barrier effects across the entire site is 125km ² - worryingly how It is dismissed as a small size and very much needs to be considered as part of the cumulative impacts with other wind farm developments, given the scale of development in the region.	The windfarm site boundary for the Project has been reduced from 125km ² to 87km ² . Additionally, the maximum number of turbines has also reduced from 40 to up to 35. Section 11.3.2 in Chapter 11 Marine Mammals (Document Reference 5.1.11), reducing potential for Project-alone barrier effects which have been assessed in the ES. Further considerations to cumulative effects have been considered in Chapter 11 Marine Mammals, Section 11.7.
MOR_018_023_300 523	We welcome the statement that an MMMP will be developed and implemented for piling to reduce the risk of PTS from the first strike of the soft start, single strike of the maximum hammer energy We also welcome that a monitoring zone has been set up and ADD activation will be used. However, A great deal more work is required to understand the effectiveness of current mitigation for underwater noise impacts and to develop better options if the current mitigation is found to be inadequate. We suggest that monitoring is undertaken to confirm the effectiveness of ADD if this is utilised.	The Applicant notes your response. A draft Marine Mammal Mitigation Protocol (MMMP) has been submitted with our application (Document Reference 6.5). A detailed MMMP will be submitted to the MMO for consultation with relevant stakeholders should piling and/ or UXO clearance be required. This will secure appropriate mitigation for those activities closer to the start of works. A draft Deemed Marine Licence (DML) (schedule 6 within the Draft DCO (Document Reference 3.1)) will also have provisions to monitor underwater noise for the first four piles of each type i.e. pin piles and monopiles. Comparisons with modelled data would be provided in the underwater noise report, to be submitted to the MMO within six weeks following the end of piling for the first four piles.
MOR_018_024_300 523	We welcome the approach in engaging with NWWT & TWT on Morecambe during the evidence plan process and we hope that this can continue into the post-consent stage to reflect the best practice we have been developing with other wind farm developers post-consent. We request to be named on all marine mammal monitoring and mitigation Documents as a consultee. We look forward to discussing this in more detail with you over the coming months.	The Applicant notes your response.
MOR_019_001_010 623	Positives:- · The offshore wind sector is a key part of our energy infrastructure and, in many instances, has created jobs for coastal communities across the UK. Whether this will lead to increased employment in the Isle of Man remains to be seen;	The Applicant notes your response. The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the

Unique Reference Identifier	Consultation response received	Applicant response
	<ul style="list-style-type: none"> · The fuel is free as the turbines run on the power of the wind generated. This reduces the overall cost in comparison to other forms of renewable energy, which may require some energy investment; · Offshore wind speeds tend to be faster than on land and more reliable, so more energy can be generated; Offshore, rather than onshore, means less visible detriment (unless of course you can see them from shore); · Clarity required if there will be a reduction in electricity costs which would be beneficial to the Council, and to many of our suppliers thereby reducing their need for price increases; · Once the pipeline is connected to the grid the interconnector will supply green energy and improve the carbon footprint. 	<p>Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.</p>
MOR_019_002_010 623	<p>There is a recognition that windfarm projects can significantly impact navigation safety, ship traffic routes, and possibly the ability to respond to at-sea emergencies; · Any lengthening of the Steam Packet's voyage from England to Douglas is bound to result in a fare increase for hauliers which would be passed on to the Council by suppliers effected. The exact lengthening of the voyage time needs to be further clarified. If there are sufficiently wide paths through the proposed windfarm then maybe there won't be any increase in Steam Packet fares required. The impact to the Steam Packet and island residents (and visitors), if this can be worked around, then it should be encouraged;</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_019_003_010 623	<p>There can be sea-bed changes as windfarms can, over time, affect the depth of water, and can obstruct tidal streams (whether this affects marine life or not?) and that offshore windfarms (the noise from the turbines) can impact fauna and other marine life;</p>	<p>The impact of the Project on the tidal regime is presented in Section 7.6.3.1 in Chapter 7 Marine Geology, Oceanography and Physical Processes (Document Reference 5.1.7). Potential effects of the Project to other receptors such as benthic species, fish and shellfish ecology, marine mammals and birds are covered in Chapter 9 Benthic Ecology (Document Reference 5.1.9), Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10), Chapter 11 Marine Mammals (Document Reference 5.1.11) and Chapter 12 Offshore Ornithology (Document Reference 5.1.12), respectively.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_019_004_010 623	and There may be interfere with communications and may adversely affect the economic stability of the Island.	Following a meeting between the Applicant and the consultee on the 11 January 2024, the Applicant sought clarity on this comment. The consultee indicated that the comment related to potential impacts to radio and communication signals to the Isle of Man. The Applicant confirmed there would be no impact to these signals.
MOR_019_005_010 623	<p>Whilst the Council acknowledges the pressing need for new and sustainable sources of energy, it is crucial that the objective is carefully balanced with the preservation of vital shipping lanes that are of utmost importance to the Isle of Man. Constructing wind farms in close proximity to long-established shipping lanes will lead to significant disruption to the Council and all residents DCC Response to Wind Farm Consultations. There does not appear to be any benefits at this stage for Douglas City Council, our residents or the Island. The Council can therefore not support the developments unless the current historic shipping routes can be maintained regardless of weather conditions. The Consultation refers to Douglas City Council as the Local Planning Authority which we would like to point out is an error, as the Isle of Man Government is the Local Planning Authority.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_020_001_010 623	<p>Strongly objects to the development of the Morgan, Mona, and Morecambe Wind Farms and associated transmission assets for the following reasons:</p> <p>1. Safety of life and safe navigation:</p> <p>1.1 The presence of the Morgan, Mona and Morecambe wind farms pose a severe risk to the safety of Company vessels, and hence the safety of those on board, in the event vessels become 'not under command' as defined by the International Regulations for Preventing Collisions at Sea</p> <p>1.2 Company vessels will be hampered by the presence of wind turbines in complying with the International Regulations for Preventing Collisions at Sea, particularly for vessels bound to/from Heysham and Warrenpoint. In complying with the Regulations, vessels strive to keep their starboard sides clear to be able to react effectively to avoid close-quarters situations. The southern infringement of the Morgan Wind Farm and the northern infringement of Mona will hamper vessels in being able to meet this basic act of good seamanship.</p> <p>1.3 the Company is concerned that the cumulative presence of the Morgan, Mona and Morecambe Wind Farms will create traffic conflicts, previously not generally experienced.</p> <p>1.4 During summer months recreational vessels are encountered requiring the vessel to deviate from course in order to maintain safe navigation and allow sufficient sea room to pass. Fishing vessel can be encountered year-round and again requirements mean vessel to allow sufficient sea room to pass. Passing recreational and fishing vessels adds additional distance and time on to the sea passage.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_020_002_010 623	<p>1.5 Response times to a marine casualty may be significantly increased due to wind farm location if a vessel is planning a route to the casualty as vessels may have to circumnavigate the wind farm to reach the casualty.</p>	<p>Following the publication of the Preliminary Environmental Information Report (PEIR), the Applicant has committed to two-lines of orientation within the windfarm site to support navigation safety and search and rescue requirements. Impacts on Search and Rescue (SAR) as a result of the Project alone are assessed in Sections 14.7.1.5, 14.7.2.5 and 14.7.3.5 in Chapter 14 Shipping and Navigation (Document Reference 5.1.14).</p> <p>Consideration of the potential cumulative effects on SAR is presented in Appendix 14.2 and summarised in Section 14.8.</p>
MOR_020_003_010 623	<p>1.6 Radar interference has been seen on radar equipment saturating the area of windfarm and therefore possible to obscure the location of small craft within the field. See below which is an example of interference on radar due to objects such as a wind farm. it has been seen that a vessel with poor radar reflective properties or lacking in AIS transmission is difficult to detect via radar equipment and therefore can be missed until within visual range and can be difficult to differentiate as above.</p>	<p>Impacts on communications, radar and positioning systems as a result of the Project alone are assessed in Sections 14.7.2.7 in Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14).</p> <p>Consideration of the potential cumulative effects on communications, radar and positioning systems is presented in Appendix 14.2 (Document Reference 5.2.14.2) and summarised in Section 14.8 in Chapter 14 Shipping and Navigation of the Environmental Statement.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_020_004_010 623	1.7 All above points with the exception of 1.4 and 1.6 were proved to be to be the case when conducting simulations at HR Wallingford on 8th and 9th September 2022. Further simulations are planned for 22nd and 23rd June 2023	<p>Project alone assessments are presented in Appendix 14.1 Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1)</p> <p>Details of the consultation undertaken as part of the Cumulative Regional Navigation Risk Assessment (CRNRA) are presented in Appendix 14.2 (Document Reference 5.2.14.2).</p> <p>It is noted that the PEIR consultation did not reflect the updated (refined) project windfarm site boundaries that were included in the second navigation simulations held with Seatruck in June 2023. Further consultation however has been undertaken with ferry route operators post PEIR submission, including the navigation simulations and the hazard workshops in September 2023 that took account of the site boundary changes made by the Project and the Mona Offshore Wind Project and Morgan Offshore Wind Project Generation Assets.</p>
MOR_020_005_010 623	1.8 This consultation period is ending before the second round of navigation simulations take place. The consultation period should be extended until all stakeholder ferry companies have completed their simulations taking place during June 2023 at HR Wallingford. Seatruck navigation simulations are scheduled for 22nd and 23rd June 2023.	It is noted that the PEIR consultation did not reflect the updated (refined) project windfarm site boundaries that were included in the second navigation simulations held with Seatruck in June 2023. Further consultation however has been undertaken with Seatruck post PEIR submission, including the navigation simulations and the hazard workshops in September 2023 that took account of the site boundary changes made by the Project and the Mona Offshore Wind Project and Morgan Offshore Wind Project Generation Assets.
MOR_020_006_010 623	<p>Page 2 of 3</p> <p>2. The Crown Estate Award Process:</p> <p>2.1 The planning and consultation in respect of the Morgan, Mona and Morecambe Wind Farms does not encompass the likely impacts and interrelations with other Irish Sea Potential Developments Areas such as those proposed off the Isle of Man and Irish coast. The Company feels that such an approach does not adequately serve the Consultation effectively.</p> <p>2.2 The Crown Estate should not have awarded leases for offshore wind farms without talking to ferry operators and other users of the marine environment first.</p> <p>2.3 If the Crown Estate had looked at AIS data would the Morgan, Mona and Morecambe sites have been awarded. We do not support the process of building wind farms in the middle of well-established and vital ferry routes.</p>	The Applicant notes your response.
MOR_020_007_010 623	<p>3. Commercial impact:</p> <p>3.1 Company vessels will have restricted options to divert from the main passage plan due to stress of weather and therefore may not be able to achieve the Company's schedules. Consequently, voyages may be cancelled and the financial impact on the Company will be severe. The effect of such cancellations on customer confidence will be detrimental to the Company's future business prospects.</p> <p>3.2 Costs due to increased voyage distance – the infringement of the</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>southern edge of the Morgan Farm will not allow Company vessel to follow the existing passage plan from Heysham and Warrenpoint and consequently voyage distances will increase. Such increased voyage distances will increase operating costs in terms of fuel and running hours and hence maintenance and servicing. Such extra operating costs will have a detrimental impact on the viability of operating a Heysham/Warrenpoint service.</p> <p>3.3 Ferries operate to tight schedules and commercial viability is not covered. Normal port turn around alongside is within the tidal constraints of the port (Heysham) which is normally 4hrs on the berth. Normal activities are arrival on to berth including manoeuvring, the discharge of the vessel (approximately 2hrs of the total port time) over four decks of the vessel and the loading operations of the vessel (the approximate remaining port time 2hrs) over four decks of the vessel. Once cargo operations are completed then the departure of the vessel from port to seaward. Schedule is based on the hight of tide that is safest for the vessel to enter and leave with sufficient under keel clearance. If the vessel has been delayed due to weather conditions, then there is the possibility of a short port turn around to get the vessel sailing on a weather route to maintain a service if it is safe to do so, equally if the vessel is delayed on the berth for any reason during cargo operations sailing may be delayed till the next tidal window.3.4 Our Dublin route is time constrained due to recent terminal change which has had a significant impact on channel transit and the legal hours of rest for the crew.3.5 If there are any time increases that result in a loss of one or more sailing per day this could make the operation uneconomic.</p>	<p>the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_020_008_010 623	<p>4. Environmental impact:</p> <p>4.1 The burning of extra fuel to achieve the Company's schedule detracts from the Company's obligation to minimise environmental damage.</p> <p>4.2 With the introduction of the Carbon Intensity Indicator (CII) regulations all ships are required to meet emission targets. Ships failing to meet the target may suffer a direct impact on charter decisions, values, financing, and insurance. Any increase of fuel burn will have a direct impact on the vessels CII.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_021_001_010 623	<p>Nationally Significant Infrastructure Project Morecambe Offshore Windfarm (Generation Assets) Preliminary Environmental Information Report (Section 42) Statutory Consultation</p> <p>Thank you for your consultation regarding the above development. The UK Health Security Agency (UKHSA) welcomes the opportunity to comment on your proposals and Preliminary Environmental Information Report (PEIR) at this stage of the Nationally Significant Infrastructure Project (NSIP). Please note that we request views from the Office for Health Improvement and Disparities (OHID) and the response provided is sent on behalf of both UKHSA and OHID. Please note that we have replied to earlier consultations, as listed below, and this response should be read in conjunction with that earlier correspondence. Request for Scoping Opinion Date: 20 July 2022</p>	<p>The Applicant notes your response.</p>
MOR_021_002_010 623	<p>The health of an individual or a population is the result of a complex interaction of a wide range of different determinants of health, from an individual's genetic make-up, to lifestyles and behaviours, and the communities, local economy, built and natural environments to global ecosystem trends. All developments will have some effect on the</p>	<p>The Applicant notes your response. Further information on our assessments can be found in Chapter 19 Human Health of the Environmental Statement (Document Reference 5.1.19).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>determinants of health, which in turn will influence the health and wellbeing of the general population, vulnerable groups and individual people. Although assessing impacts on health beyond direct effects from, for example emissions to air or road traffic incidents is complex, there is a need to ensure a proportionate assessment focused on an application's significant effects. We note that the project relates to windfarm energy generating assets and activities, with few onshore activities.</p>	
MOR_021_003_010 623	<p>We have considered the submitted Documentation and can confirm that we are satisfied with the approach taken in preparing the Environmental Impact Assessment (EIA) and the conclusions drawn. We wish to make no further comment at this time.</p>	<p>The Applicant notes your response.</p>
MOR_022_001_010 623	<p>Thank you for the opportunity to respond to your consultation on the Morgan offshore windfarm proposals.</p> <p>I am very supportive of the increase in renewable energy generation to mitigate climate change but I am concerned that the location of the proposed windfarms will interfere with the Isle of Man ferry routes. Please can you give an assurance that you have engaged with the IoM Steam Packet Company Ltd to ensure wider corridors are planned to reduce possible disruption to our lifeline shipping route, especially the bad weather alternative routes. I expect you have received much feedback from island residents and politicians but I would appreciate being kept informed of progress.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p> <p>Consultation with ferry route operators, including the IoM Steam Packet Company and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p>
MOR_023_001_020 623	<p>The Isle of Man Steam Packet has provided the ferry service to the Isle of Man for almost 200 years and the direct Heysham and Liverpool routes are lifeline services for a remote Island community with 85,000 people. The Island is completely dependent on IOMSPC reliable services. UK and Isle of Man Government policy highlights that it is essential for to protect remote Island community lifeline routes. The Company carries around 600,000 passengers, 150,000 private vehicles and 40,000 freight trailers/vans per annum and is the only Ro-Ro ferry service to the Isle of Man carrying all urgent 'just-in time' food, retail, medicine and time sensitive lifeline and business supplies.</p>	<p>The Applicant notes your response.</p>
MOR_023_002_020 623	<p>The Company has not objected to other Irish Sea Offshore Windfarms (OWF's) positioned away from our direct and weather routes but the Morgan and Mona development locations need to be adjusted to avoid our direct Isle of Man shipping routes and to maintain prudent Navigation safety margins and requirements in the frequently harsh Irish Sea weather.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_003_020 623	<p>Even a 3-5 minute extra deviation will compromise vessel turnarounds during busy periods and lead to essential goods being left in Heysham as IOMSPC is already having to divert around West of Duddon Sands OWF (WoDS).The cumulative impact of the development (on top of WoDS) as currently specified will:- Disrupt remote Island lifeline supplies as freight trailers will be left in Heysham at peak volume periods due to a 8 minute reduction in freight loading time (WoDS and Morgan cumulative) – with no ability to speed up vessel or port turnarounds. - Disrupt Island lifeline supplies due to the reduction in weather routing options and the increased passage time for weather routing (4 times daily) will also lead to the cancellation of subsequent rotations. IOMSPC considers Heysham cancellations could double or treble as there will be insufficient time to ‘catch up’ from longer weather routes (x4). This will lead to a disruption to Island lifeline supplies and this is clearly unacceptable for end users.- Compromise safety of navigation due to insufficient gap between Walney and Morgan (as proven Wallingford simulations)- Increase risk to crew safety during turnarounds time in ports with significant cumulative restrictions on the time available. - Increase fuel costs and CO2 emissions.- Disrupt essential Island connectivity - IOMSPC services provide essential travel means for the public to and from the Isle of Man (IOM), and the IOM community rely on timely services for receiving UK medical treatment, travel overseas, business, 2.tourism and day to day travel needs. The Island has a small domestic airport and over the years there have been issues in having reliable air travel and retaining service providers due to challenging financial difficulties faced by airlines for relatively modest scale operations. - Reduced turnaround times and any failure to carry all booked traffic will lead to reputational damage resulting in long term passenger abstraction to air and IOMSPC revenue loss.- Increased cancellation rates for adverse weather periods Spring and Autumn will lead to reputational damage and loss of volume/revenues, and the Liverpool route is particularly vulnerable to revenue reductions</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts to the Isle of Man have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_004_020 623	While some UK shipping routes may not be materially affected by small diversions around OWF's (if the specific routes have 'surplus' time available), in the Isle of Man, the Heysham ferry is operating or loading/discharging 24/7 all year and there is no 'slack' in the timetable or surplus speed capability to recover from any disruption or additional diversions. 5 or 10 minutes diversions can therefore result in lifeline freight supplies being left in Heysham due to peak period turnaround time constraints. The Isle of Man Government policy is to boost the population to 100,000 and boost tourism and diversions will compromise this policy. The IOMSPC's new vessel, at a cost of £78m, has been specifically designed to offer 60% greater passenger capacity which will make turnarounds even more challenging. Any diversions of even one minute or more will therefore compromise this capacity investment and compromise the ability to load all freight trailers at peak periods.	Impacts to ferry routeing are assessed and a detailed Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.
MOR_023_005_020 623	IOMSPC will oppose an infringement on its c.200 year old essential lifeline direct routes and Morgan and Mona developments should be re-positioned to avoid further route deviations which will disrupt continuity of passenger travel and supply to a remote island community. 1.1 The Isle of Man is completely dependent on 'just in time' reliable lifeline deliveries and food retailers, manufacturers, businesses, medical centres, etc, do not have warehousing storage facility space and any disruptions in ferry supplies have an immediate and serious negative impact.	The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.
MOR_023_006_020 623	The Ben-My-Chree (Passenger/Freight Ferry) on the twice daily Heysham route was purpose built for the direct Heysham route (pre WoDS diversions) and has no 'spare time' in her 24 hour timetable and no ability to increase speed. Even modest diversions around Morgan, on top of existing daily WoDS diversions (and occasional weather diversions), will reduce the port turnaround time to load freight trailers - which at busy periods will lead to freight being left in Heysham and empty supermarket shelves or other essential freight customers disruption.	The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets The Applicant has no further comment.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_007_020623	<p>The Island's population has increased from c.65,000 to 85,000 over the past 30 years and is projected to grow to 100,000 and freight/passenger traffic demand and tourism are all expected to grow. IOMSPC's new vessel at a cost of £78m has been specifically designed to offer 60% greater passenger capacity which will make turnarounds even more challenging. Any diversions of even a minute or more will therefore compromise this capacity investment and compromise the ability to load all freight trailers at peak periods. The growth in demand per sailing will lead to a significant increase in the number of sailings operating close to capacity while the turnaround times cannot be increased and cannot be 'sped up' due to physical and safety constraints. Any reduction in turnaround times arising from additional route deviations will ultimately lead to disruptions in vital lifeline freight supplies.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_008_020623	<p>The Isle of Man is a 'remote Island community' and the Irish Sea is known for its harsh climate. Weather related or other sailing disruptions have a serious negative impact on the Islands lifeline food, medical, business supplies and passengers. Unlike many UK ferry routes there are no other Ro-Ro ferry services or routes to help compensate and there is no slack in the timetable to recover from delays and windfarm diversions</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts to the Isle of Man have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_009_020 623	<p>Disruptions to sailings or insufficient loading time can have severe consequences. Any disruption can have extreme consequences and there have been a number of examples of severe issues/disruptions faced in recent years, e.g.- Empty supermarket shelves and 'panic buying'.- Disruption to 'just in time' business supplies for manufacturing, construction, agriculture, retailing etc.- Disruptions to Pharmacy and Hospital medicines and oxygen for the Hospital.- Issues related to supply of urgent water treatment chemicals.- Potential airport closure as replacement airport fire engine urgently required. Cancellations, weather routing or delays can lead to freight and passenger backlogs, sometimes for several days and any reduction in turnaround load times arising from Morgan and Mona diversions would compound these disruption risks and lower the ability to cope with backlogs.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts to the Isle of Man have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p> <p>The Applicant has no comment on the final piece of feedback as this refers to the Mona Offshore Wind Project and the Morgan Offshore Wind Project Generation Assets.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_010_020 623	<p>Company vessels already have to divert around the 'West of Duddon Sands' OWF, already increasing passage times by approximately 5 minutes each sailing. The Morgan/Mona OWFs as drafted in the PEIR would therefore increase direct routes by an extra 8 minutes per crossing, four times daily. With typically half an hour to discharge all freight and passenger vehicles, the load/lashing time for all freight trailers, vans, cars and coaches will be reduced from c.1 hour to only c. 50 minutes, a significant reduction of 16%. Vehicle decks with freight trailer movements are potentially dangerous environments for crew and passengers. While staff will be able to load safely on quieter sailings the OWFs positioned on direct routes may compromise turnaround safety if staff feel pressured to marshall, arrange freight trestles and lashing chains in even tighter timeframes. Passenger cars will be loaded as a priority to avoid long term reputational damage but time-sensitive lifeline freight trailers will inevitably be left if there is insufficient time in port. The costs and consequences of leaving freight trailers could be extremely severe for Island businesses and organisations and 'groupage' trailers can have numerous end customers. It is essential that the negative effect and costs to potentially hundreds of lifeline 'end user/customers' are considered/avoided, e.g. haulier labour costs, manufacturing loss of production or sales, food/other retailer empty shelves, pharmacy supply disruption, business downtime or loss of sales, costs of workforce downtime, long term business reputational damage, etc. Disruption/costs could be compounded if there is no space/time on the following departure 12 hours later and Just in Time goods are therefore further delayed. Alternatively if private vehicle bookings had to be restricted at peak periods to allow more time for freight trailers, then this would cost IOMSPC hundreds of thousands income, also depressing visitor numbers and income for the Isle of Man tourism and accommodation industry</p>	<p>The Applicant has no further comment as feedback refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project.</p>
MOR_023_011_020 623	<p>MV Manxman (larger Passenger/Freight Ferry) will replace MV Ben-my-Chree on the Heysham route in 2023 on the same timetable. The vessel has 1000 passenger capacity (versus 630) and a larger vehicle deck to provide greater capacity for future volume growth and for existing peak demand periods such as school holidays, bank holidays, tourism events such as the IOM TT Races, Manx Grand Prix, Car Rally events and sporting events. While cars/vans are relatively quick to load, TT/MGP motorbikes (up to 40,000 carried in a fortnight) all have to be individually lashed and secured and the £75m investment in MV Manxman capacity will be compromised by any reduced loading time and negative impact on the volume of traffic that can be booked and safely loaded during these peak events.</p>	<p>The Applicant notes your response.</p> <p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project. Loading times has been assessed and presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_012_020 623	TT and MGP periods always have excess demand and turnarounds are already extremely tight. The Company's plans to book freight on MV Ben-my-Chree during TT and load as many as 500 motorbikes (and cars/vans) on MV Manxman will be compromised by the extra passage time from WoDS and Morgan/Mona OWF diversions and tourist traffic/income to IOM would therefore be reduced.	The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.
MOR_023_013_020 623	Deviations should also be avoided from a fuel cost and emissions perspective. Even if the developer provided fuel cost compensation to IOMSPC this will not compensate for offsetting costs, and will not compensate end users in a remote Island community for potentially extreme consequences/costs from trailers being left in Heysham.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts to the Isle of Man have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_014_020 623	<p>Section 2: Interference With Remote Island Lifeline And Strategic Supply Government Policies</p> <p>The Morgan and Mona developments interference with the Isle of Man direct routes contravene a number of Isle of Man and UK Government Policy statements: 2.1 The Isle of Man Government “Manx Marine Environmental Assessment (MMEA)”, Chapter 6.2 identifies that direct shipping routes are strategic requirements for Isle of Man and must be preserved. Quote: “Ro-ro shipping services carry the bulk of the Islands essential supplies with many Island businesses operating ‘Just in Time’ delivery schedules” “These services bring most of the food, raw materials, equipment and consumables used throughout the Island as well as carrying approximately 600,000 passengers annually” “The Cumulative impact of the various developments needs to be considered and direct routes as well as weather routing options will remain vital to shipping and the service provided to the Isle of Man’s economy and its resident and visiting population” Morgan and Mona proposed developments on direct routes contravene the Isle of Man Government MMEA policy:</p> <p>“It is essential for the Isle of Man that direct routes between the Isle of Man, England, Northern Ireland, and Ireland be preserved”</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.</p>
MOR_023_015_020 623	<p>HM Government ‘UK Marine Policy Statement (MPS)’, Section 3.4 UK Government MPS Section 3.4 identifies that negative impacts on shipping should be avoided. Quote: “Ports and shipping play an important role in the activities taking place within the marine environment. They are an essential part of the UK economy” (3.4.1) “Some 95% of international trade by volume passes through ports.....our ports, particularly in Scotland, provide infrastructure and facilities to support lifeline ferry services to island communities. Their role is crucial not only in supporting the projected future growth of freight traffic, but also supporting more fragile and remote communities” (3.4.2) “Shipping is an essential and valuable economic activity for the UK” (3.4.5) Morgan and Mona positioning on our direct lifeline routes contravenes. “Marine plan authorities and decision makers should take into account and seek to minimise any negative impacts on shipping activity, freedom of navigation, and Navigation safety” (3.4.7)</p>	<p>The Applicant notes your response. The comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.</p> <p>However, the Applicant would like to direct you to the Project’s Marine Plan Policy Review (Document Reference 4.7), which has addressed impacts on shipping in terms of the NW Marine Plan policies.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_016_020 623	National Policy Statement for Renewable Energy (EN-3). The positioning of Morgan and Mona on our direct lifeline ferry routes will lead to reduced turnaround times which contravenes the principle highlighted in para .6.162. Quote: “The IPC should be satisfied that the site selection has been made with a view to avoiding or minimising disruption or economic loss to the shipping or navigation industries with particular regard to approaches to ports and to strategic routes essential to regional, national and international trade, lifeline ferries” As WoDS and Morgan proposed area will reduce turnaround load times by as much as c.16%-20% we consider this is a direct contravention of the principle (2.6.163):“The IPC should expect the applicant to minimise negative impacts to as low as reasonably practical (ALARP)”The c.20% reduction in turnaround loading time may also pose an increased risk to safety and human error and we note 2.6.165 “The IPC should not consent applications which pose unacceptable risks to Navigation safety after all possible mitigation measures have been considered”	The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.
MOR_023_017_020 623	The “UK Offshore Energy Strategic Environmental Assessment” also notes that shipping is essential to the UK and identifies shipping should not be materially adversely affected. The Morgan and Mona developments should be re-positioned to avoid the Isle of Man direct shipping routes. Even modest diversions will increase fuel/costs and emissions and lead to supply disruption at peak periods with social and economic consequences for the Islands population and businesses. Weather routing around Morgan will lead to additional vessel cancellations as the extra passage time 4 times a day is too long to ‘catch up’. This could easily double or treble cancellations leading to a major disruption in lifeline supplies.	The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_018_020 623	<p>The company is concerned that the cumulative impact of all the various Irish Sea windfarms will compromise safety, reduce freedom of navigation and reduce weather routing options, leading to safety issues and increased sailing cancellations. As a minimum the gap between Walney and proposed Morgan development needs to be increased to a minimum of 5 – 6 miles at any point:</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_023_019_020 623	<p>We note HR Wallingford Report (20 December 2022) re simulations. Quote 3.1 “With traffic situations at the narrowest gap between Morgan and Mona, situations occurred with marginal passing distances...in some cases this action resulted in the vessel responding more to the waves leading to marginal or failed ship motion criteria” 3.2 “In annually occurring conditions, the corridor between the existing Walney OWF and the proposed Morgan OWF was not viable”.... “Not sufficient space to pass with clearances that were acceptable to the masters.. if any alteration to course was required”There is also not enough space to deal with an emergency scenario if it requires the master to head into the wind and waves for any significant period of time</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_020_020 623	<p>“Widening the proposed minimum 3.7 nm gap between proposed Morgan and Mona OWFs to about 5 nautical miles, would alleviate the traffic issues”. While 5 miles between OWFs and all other fixed obstructions would be a minimum, IOMSPC considers that 6 miles would be more prudent - particularly as any adverse weather/poor visibility/limited sea room scenario leading to a collision would lead to a vessel being potentially out of action for 6 months or more, with no real prospects of obtaining charter tonnage that can fit within the limited confines of Heysham and Douglas harbours. In practice 5nm could also lead to increased cancellations in adverse weather as masters would seek to avoid risk, but this would then compromise IOM lifeline supplies and passengers. 3.6 Further work will be required on 5nm.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.</p>
MOR_023_021_020 623	<p>We note that developers have already (verbally) agreed that minimum 5 nm is required between OFWs and other obstructions - but to date the revised plans received only provide 1.6 nm – (contrary to maps provided which ignore Millon Gas field platform) which is unacceptable from a Navigation safety perspective.</p>	<p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km², increasing the gap between the Project and other proposed offshore windfarm projects. Information is as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p>
MOR_023_022_020 623	<p>We certainly emphasise the need for further NRA simulation work to consider night time navigation assessment, any change of project boundary, fishing activity peak seasons, ship manoeuvring characteristics Manannan (Large High Speed Craft) and Manxman. It is worth noting that previous NRA simulation did not take account of night time navigation assessment, nor was it able to simulate the weather impact on our large High Speed Craft (Manannan) which carries 850 passengers, cars and freight operating between windfarms.</p>	<p>Navigation simulations took place with the ferry operators, including the Isle of Man Steam Packet in 2023. These simulations incorporated the amendments to the windfarm site boundaries for the Project and Mona and Morgan wind farm projects, more representative fishing activity and inclusion of nighttime simulations, all of which were successful.</p> <p>These changes are presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p>
MOR_023_023_020 623	<p>Shifting of trailers and cargo in the harsh Irish Sea climate is not uncommon, and the lack of sea room needed for the Captain to place the vessel on a safe heading due to the presence of windfarms on both side of the route (gap between the proposed Morgan and existing West Duddon Sands projects) is highly concerning. Such issues were demonstrated in recent years with the MV Riverdance incident at Blackpool beach and again repeated during Morgan/Mona NRA simulation which was Documented to be “failed & unacceptable”.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_024_020 623	Vehicle decks with heavy freight trailer movements are potentially dangerous environments for crew and passengers. While staff will be able to load safely on quieter sailings the OWFs positioned on direct routes may compromise turnaround safety if staff feel pressured to marshall, arrange freight trestles and lashing chains in even tighter timeframes (significant reduction following WodS and Morgan diversions).	<p>The Applicant notes your response.</p> <p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project. Loading times has been assessed and presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>The final comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>
MOR_023_025_020 623	IOMSPC notes with concern the cumulative impact of all the various OWF's which will negatively impact on weather routing options and safety. An absence of weather routing options will lead to increased cancellations of services that are currently viable and therefore disrupt lifeline supplies and passenger (i.e. IOM business staff) travel. It is essential that these cumulative impacts are also considered carefully before proceeding with these developments	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_026_020 623	Section 4: Environmental Impact On Route Diversion. As an example and to illustrate the Environmental impact caused on Douglas-Heysham diversion by the Ben-My-Chree as result of the Morgan project and in way of additional CO2 emission, 848 tonnes of CO2 per year will be produced as result. The additional amount of CO2 emissions indicated does not include those created during adverse weather routing which will significantly increase (diversion of 40mins per trip and on the basis of conservative 10% of the annual number of trips will add further 422 tonnes of CO2 emissions).	The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.
MOR_023_027_020 623	Following review of the submission, IOMSPC expresses disappointment and real concern on the content with particular attention to Volume II (Shipping & Navigation and Socio-economics) where the impact assessment is fundamentally incorrect in a number of areas. The submission does not reflect the IOMSPC's input and engagement in a number of meetings/workshops as well as the findings from the simulation sessions taken at HR Wallingford Simulator Sessions. It is clear from this PEIR submission that NASH Maritime who are employed by the developers have not impartially reflected very significant issues for safety and lifeline supply to a remote Island community.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_023_028_020 623	Mona & Morgan Historical Incident (PEIR)Table 12.10: MAIB/RNLI incident frequencies within 10nm per year (2008-2020) IOMSPC comment - The subject table does not include one of most known ferry disasters in the NW of the UK in 2008 and where the MAIB made an extensive incident report (see extract below in relation to the project area and its surrounding known weather with freak waves). This begs the question on the need for sea room to allow the vessel to weather route on normal passage, or in way of preparedness to divert should a cargo shift. It is worth noting such incident would have different magnitude for our Ro/Pax carrying up to 1000 passengers and freight	The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant has no further comment.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>cargo. Hence the need for sea room around the Douglas-Heysham route becomes top priority.</p>	
<p>MOR_023_029_020 623</p>	<p>For illustration we have extracted sections from the MAIB Report on MV Riverdance Ferry Incident which occurred in the vicinity of the proposed project area in 2008.2.5.2 “Freak” waves during the initial reports made to the coastguard, it was suggested that the initial list was due to Riverdance being struck by a “freak” (i.e. abnormal) wave. However, the area around the Lune Deep is notorious for large, steep faced swells, and in the weather conditions experienced at the time of this accident, large and unpredictable swells could have been reasonably foreseen. Waves experienced by Riverdance might well have been excessive, with swell waves reported to be up to 7.0m. They would also have been intensified, and been made steeper, as a result of the ebb tide from Morecambe Bay. However, this could not be considered to be “freak”, especially within this area. “Meanwhile, on the bridge, the master had disengaged the automatic pilot and, in manual steering, placed the wheel hard over to starboard. It was his intention to bring Riverdance’s head round into the wind to reduce the rolling. Riverdance then experienced a change of ship’s head from 103° to 170° within 39 seconds, a rate of turn of over 100° per minute (Figures 4a and b). During the turn, the vessel’s list to port increased substantially, reportedly up to 50°”</p>	<p>Whilst the MV Riverdance is not reported in this section, the incident is well known to the Project team and contributed to the drafting of the NRA and Shipping and Navigation Chapter. It’s important to note that this incident occurred outside of the study area.</p> <p>The navigation simulations undertaken in 2022 for the Project’s PEIR and in 2023 for the Project’s Environmental Statement (ES) - which the Isle of Man Steam Packet Company attended - also assessed extreme adverse weather conditions.</p>
<p>MOR_023_030_020 623</p>	<p>Safety Issue Identified and Recorded By The MAIB From Riverdance Incident: “The weather conditions at the time of the initial heeling accident were very poor and could have led to difficulties in steering, broaching or loss of stability”.</p>	<p>Whilst the MV Riverdance is not reported in this section, the incident is well known to the Project team and contributed to the drafting of the NRA and Shipping and Navigation Chapter. It’s important to note that this incident occurred outside of the study area.</p> <p>The navigation simulations undertaken in 2022 for the Project’s PEIR and in 2023 for the Project’s Environmental Statement (ES) - which the Isle of Man Steam Packet Company attended - also assessed extreme adverse weather conditions.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_031_020 623	<p>Extracts from Morgan PEIR Chapters 12 and 18 and IOMSPC Comments</p> <p>12.4.4.25 Page 15“Commercial shipping routes with more than one vessel movement per day within the shipping and navigation study area are all to/from the Port of Liverpool and are clear of the Morgan Array Area. There are numerous commercial routes with less than one vessel per day passing through or adjacent to the Morgan Array Area. These include routes into Heysham and Douglas and alternative routes to/from Liverpool from the east of the Isle of Man. Most of these routes have less than one commercial vessel transit per week. Analysis of vessel tracks during Met Office named storm events did not identify any repeatable adverse weather routing by commercial shipping. However, during strong south westerlies, the anchorage to the east of Anglesey was in greater demand by vessels” IOMSPC comment - The paragraph appears incorrect/misleading - IOMSPC Douglas -Heysham lifeline commercial shipping route usually has 4 sailings per day through Morgan.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>
MOR_023_032_020 623	<p>“Construction Phase” Magnitude of Impact</p> <p>12.8.3.3 During construction, vessel traffic would be displaced from the Morgan Array Area due to the presence of construction buoyage and safety zones around fixed structures which are under construction. It is anticipated that mariners would also maintain safe passing distance of at least one nautical mile from Navigation hazards. It is anticipated vessels would deviate around the construction site. The analysis of vessel routes in section 12.4.4 shows that several ferry and commercial shipping routes would necessitate deviation around the Morgan Array Area (see Table 12.17 and Table 12.18, and Figure 12.6 and Figure 12.7 respectively). The revised passage plans were developed by the NASH project team, including master mariners, and account for existing decision-making principles (such as passing at least 1.5nm from a wind turbine) that were obtained during consultation with operators and the navigation simulation sessions (see volume 4, annex 12.1: Navigation Risk Assessment of the PEIR). Of the four ferry routes directly impacted by the Morgan Array Area:· The Isle of Man Steam Packet Company route between Heysham and Douglas with approximately 1,300 movements per year passing across the northeast boundary of the Morgan Array Area. This would require a deviation of 1.0nm / 3.5 minutes of steaming time per trip to the northeast, through the centre of the corridor between the Morgan Array Area and Walney Offshore Wind Farm”</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_033_020 623	<p>IOMSPC comment - The Reference to 3.5 minutes is misleading as IOMSPC is now having to deviate around the West of Duddon Sands OWF and the combined deviation around WoDS and now Morgan would add c.8 minutes per sailing to the Islands direct route (four times daily). - Revised Passage plans need to be decided/developed by the Operators Masters (not NASH project team) who are armed with local knowledge and familiar with the sea area climate/routes/traffic likely to be encountered.</p> <p>- With almost 200 years Steam Packet experience on the Heysham-Douglas route, it is not uncommon where the vessel has to wait outside the confined Heysham to alleviate port entry wind or visibility limitations as well as height of tide - such occurrences can only aggravate remaining turn around time in the port to accommodate normal traffic. - To obtain planning approval the southern tip of WoDS development was reduced to avoid excessive deviations for IOMSPC but the Morgan proposal now adds further deviations.</p> <p>- Turnaround times for IOMSPC vehicles/freight can be extremely challenging at peak periods. Discharge and loading times for freight/cars vary due to daily variations in demand and the mix of private and commercial traffic, but freight trailer load times of only c.40 minutes would effectively be reduced to c.30 minutes.- 95% of IOMSPC freight is 'drop-trailers' (i.e. not self-propelled) and each individual trailer has to be hitched to a tug master tractor unit, reversed down the linkspan and onto the upper or lower vehicle decks (with no passengers present) and then safely unhitched, stowed and chained, before the tug master driver can exit the internal ramp and vessel to hitch up, drive and load the next trailer etc. etc. . These issues will be compounded as:· IOM population and traffic per sailing is projected to grow;· The vessel was purpose built, operates 24/7, cannot 'speed up' or make up time.· With significantly reduced time for the safe loading of freight trailers, the combined WoDS/Morgan deviation will at peak periods lead to goods being left in Heysham due to insufficient time to load/lash and the need to maintain published timetables· With much of IOMSPC freight shipped as 'groupage' via haulage companies and potentially sometimes hundreds of end recipients, IOMSPC is in no position to arbitrarily determine which booked freight trailers are 'urgent'/life-threatening and which are not.· "The Isle of Man Steam Packet Company route between Douglas and Liverpool with approximately 625 movements per year passes across the southwest boundary of the Morgan Array Area. This would require a deviation of 0.3nm / 0.6 minutes of steaming time per trip" IOMSPC comment - 0.8 minutes (see 12.10.3.5) may appear relatively minor but IOMSPC carries around 600,000 passengers p/a and it would clearly be more sensible for UK/IOM and general public to avoid unnecessary deviations and to avoid extra fuel cost, passage time, and reductions of traffic (to air competition).- The above statement</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>does not accommodate the impact on the route which needs to be followed during most commonly South Westerly adverse weather, and where the vessel will have greater impact on rerouting in the absence of sea room created by the Morgan project area. This will lead to increased sailing cancellations as a result, particularly concentrated in the Spring and Autumn periods for HSC Manannan.</p>	
<p>MOR_023_034_020 623</p>	<p>12.8.3.10 “For commercial routes, only routes with less than one transit per day would be impacted and are widely dispersed within the shipping and navigation study area. Whilst impacts to these routes may be of greater magnitude, they have far fewer vessel transits. Of the routes which have the greatest deviations, which are between Liverpool and ports or passages to the east of the Isle of Man, these would necessitate an increase in distance of less than 2.5nm which is not anticipated to make such routes unviable. Table 12.18 shows some routes with minor reductions in distance, caused by the Morgan Array Area making less direct routes, routinely used to avoid traffic or weather, no longer possible. ”IOMSPC comment – This is misleading/incorrect. The Douglas - Heysham route carries 95% of all commercial goods to the Isle of Man, and it is clearly a ‘commercial route’ to a remote Island community completely dependent on reliable links.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>
<p>MOR_023_035_020 623</p>	<p>12.8.3.11 “Timetabled ferry services are more sensitive to impacts associated with increased transit time due to constraints on their schedules, berthing or crewing requirements (see volume 4, annex 12.1: Navigation risk assessment of the PEIR). Four routes would require deviation around the Morgan Array Area: The Isle of Man Steam Packet Company route between Heysham and Douglas with approximately 1,300 movements per year passes across the northeast boundary of the Morgan Array Area. To pass clear to the northeast this would necessitate an additional 3.5 minutes of steaming time per trip. On a three hour and 45 minute service, with greater existing variation in transit duration and turn around time, the deviation is not anticipated to impose significant operational impacts ”IOMSPC comment - IOMSPC vessel is already having to divert around WoDS OWF and the combined additional passage time will significantly reduce turnaround times for the loading of freight trailers. This will be a VERY SERIOUS negative impact which on busy dates will lead to urgent lifeline supplies being left in Heysham.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_036_020 623	<p>“The Isle of Man Steam Packet Company route between Douglas and Liverpool, with approximately 625 movements per year, passes across the northwest boundary of the Morgan Array Area. To pass to the west, this would necessitate an additional 0.6 minutes of steaming time per trip. On a three hour service, with greater existing operational variation in transit duration and turn around time, the deviation is not anticipated to impose significant operational impacts IOMSPC comment – much longer weather routings would lead to increased cancellations, reputational damage, loss of revenues.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>
MOR_023_037_020 623	<p>12.8.3.12 “As the additional impact on these routes is less than existing operational constraints, the sensitivity of the receptor is, therefore, considered to be low. ”IOMSPC comment - further deviation of the Heysham-Douglas route must be avoided as leaving lifeline freight in Heysham is unacceptable.- Impact on the Safety of Navigation created by the project area was demonstrated during the simulation where NRA confirmed unacceptable level of risk.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_023_038_020 623	<p>12.8.3. “Significance of the Effect Overall, the magnitude of the impact is deemed to be high and the sensitivity of the receptor is considered to be Low. The effect will, therefore, be of minor adverse significance, which is not significant in EIA terms. A Minor rather than Moderate effect has been determined given the minimal increase in journey times which are within the existing natural variation of operator schedules. ”IOMSPC comment - extra deviations on top of WoDS deviations are NOT ‘minor adverse’! – Lifeline freight/essential supplies will be left on</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>busier dates – which could be devastating for food/medical /business supplies, etc.</p>	<p>Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
<p>MOR_023_039_020 623</p>	<p>“Operations and Maintenance Phase The impacts to commercial operators including strategic routes and lifeline ferries during operations and maintenance are not anticipated to be substantially different to those during construction. During both the construction and the operational phases of the Morgan Generation Assets, large commercial ships will not be able to transit through the Morgan Array Area, whether through the presence of construction buoyage or structures and therefore the impact on vessel routeing will be the same, albeit for different durations. Therefore, the magnitude of the impact is deemed to be high and the sensitivity of the receptor is considered to be low. The effect will, therefore, be of minor adverse significance, which is not significant in EIA terms. A minor rather than moderate effect has been determined given the minimal increase in journey times which are within the existing natural variation of operator schedules.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_040_020 623	<p>Decommissioning Phase</p> <p>The impacts to commercial operators including strategic routes and lifeline ferries during decommissioning are not anticipated to be substantially different to those during construction. During both the construction and the decommissioning phases of the Morgan Generation Assets, large commercial ships will not be able to transit through the Morgan Array Area, whether through the presence of decommissioning buoyage or structures and therefore the impact on vessel routeing will be the same. However, it should be noted that the impacts will reduce as decommissioning progresses and the extent of structures within the Morgan Array Area reduces. Therefore, the magnitude of the impact is deemed to be high and the sensitivity of the receptor is considered to be low. The effect will, therefore, be of minor adverse significance, which is not significant in EIA terms. A minor rather than moderate effect has been determined given the minimal increase in journey times which are within the existing natural variation of operator schedules.”</p> <p>IOMSPC comment - extra deviations on top of WODS deviations are NOT 'minor' -lifeline freight will be left at peak periods.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>
MOR_023_041_020 623	<p>“The Isle of Man Steam Packet Company Heysham to Douglas adverse weather routeing accounts for an additional 10 to 23 minutes of journey time, on a 225 minute journey, as identified within the 2019 AIS data. During the navigation simulations and consultation, it was determined that these vessels would be unlikely to transit through the corridor between the Morgan Array Area and Walney Offshore Wind Farm during adverse weather, instead choosing to navigate to the west of the Morgan Array Area where there is greater sea room and ability to choose a safer and more comfortable heading. This would necessitate a further 17 minutes in journey times, a total delay of at least 27 minutes to the typical route.” IOMSPC comment – i.e. 27 to 40 minutes extra passage time for each sailing (speed variation during adverse weather) which would lead to as much as 2 hours 40 minutes delay in each 24 hours. While the Company could potentially operate one return per day in this scenario, it is highly questionable whether the second rotation or subsequent rotations could still be provided due to the cumulative delays from the inability to take shorter adverse weather routes. Therefore prolonged adverse weather of more than 12 hours would lead to an additional cancellation as a result of Morgan. While IOMSPC would clearly seek to minimise delays where possible, in reality the Company could not catch up from a 2 hour or 2 hour 40 minute delay and so cancellations would inevitably result - leading to disruptions in food/medicines /business supplies etc for the Isle of Man. IOMSPC considers current cancellation rates could easily double or treble.</p>	<p>The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_042_020 623	12.8.4.17 “Ferry services in the shipping and navigation study area are important for facilitating trade, tourism and other important functions. In particular, consultees emphasised that services between the Isle of Man and the UK are lifeline services which carry food and goods which are crucial in a just-in-time economy. The socio-economics assessment and approach for considering potential impacts of the Morgan Generation Assets on the IoM is set out within volume 2, chapter 18: Socio-economics of the PEIR” IOMSPC comment - Chapter 18 has no impact assessment for IOM businesses/economy!	The Applicant notes your response. However the comment refers to the Morgan Offshore Wind Project Generation Assets. The Applicant has no further comment.
MOR_023_043_020 623	“During adverse weather, cargo shift as a result of reduced optionality on vessel heading could cause minor injuries and property damage. Due to the potential loss of services to the Isle of Man, the sensitivity of the receptor is therefore, considered to be medium.” IOMSPC comment - additional cancellations and the (cumulative) increased risk of leaving urgent freight in Heysham are extremely sensitive/serious, with significant negative impact to a remote Island community.	The Applicant notes your response. However this extract refers to the Morgan Offshore Wind Project Generation Assets Preliminary Environmental Information Report. The Applicant has no further comment.
MOR_023_044_020 623	12.8.4.5 “During consultation and Navigation simulations, the conditions in which adverse weather routes would be taken, or services cancelled, was shown to be dependent on many different factors including route, vessel, wind/wave directions, wind speed and wave height. However, it was estimated that the Isle of Man Steam Packet Company service between Liverpool and Douglas (Manannan) would be impacted at a significant wave height (Hs) of 1.6m and cancelled at 2m Hs. The Stena route between Liverpool and Belfast would be impacted at 2.4m Hs and cancelled at 3.4m Hs. These thresholds are noted to be conservative given the frequency of occurrence for historical transits in 2019 (see Table 12.19)” IOMSPC comment – The estimation on Significant Wave height impact for Liverpool route vessel (Manannan) is incorrect as the vessel is designed and MCA certified to operate up to 3.5m significant wave height, and where weather routing becomes essential for this type of vessel to achieve a sailing. Passenger comfort is extremely relevant hence the need for weather routing in lesser adverse weather conditions. It is worth noting that the IOM Met Office estimate strong wind/adverse weather up to 40% of the annual weather condition experience in the Irish Sea.	The Applicant notes your response. However this extract refers to the Morgan Offshore Wind Project Generation Assets Preliminary Environmental Information Report. The Applicant has no further comment.
MOR_023_045_020 623	Chapter 18 Socio -Economics. IOMSPC comment - The first 72 pages of Chapter 18 only considers the impact to UK and there has been no assessment or consultation to date on the serious adverse impact on IOM end users (people and businesses/organisations), even though the UK Government policy states that lifeline routes to remote communities must be protected. There is only one page Reference (page 73) which acknowledges that	The Applicant notes your response. However this extract refers to the Morgan Offshore Wind Project Generation Assets Preliminary Environmental Information Report. The Applicant has no further comment.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>the Morgan negative socioeconomic impact on the Isle of Man needs further assessment. Why hasn't this serious socioeconomic impact been considered to date? Leaving food or medicines or business supplies in Heysham would clearly have a major impact to an Island community completely dependent on its lifeline shipping. Chapter 18, page 73, refers to these impacts as 'indirect' consequences but 85,000 people in a remote Island community will be directly impacted by these proposals (disruptions to lifeline food supplies, hospitals, manufacturing businesses , just in time supplies to over 400 companies).WODS and Morgan combined deviations of over 10 minutes will lead to freight trailers being left in Heysham on busy days - all freight on the Heysham-Douglas Ro-Ro service is 'just in time' time-sensitive, so who/how should IOMSPC determine what freight can be left? . What will be the impact on IOM end user businesses, employment, tourism, IOM economy etc. etc. etc.?10 minutes deviations around WODS and Morgan (combined effect) will lead to a reduction in IOM TT, MGP and special event tourism as there will be a notable reduction in motorbike/vehicle loading and lashing times. What will be the impact on IOM tourism/economy</p>	
MOR_023_046_020623	<p>Chapter 12 states c. 50% increase in weather cancellations due to Morgan but IOMSPC estimates that 2 hours to 2 hours 40 minutes extra passage time per day for weather routing around Morgan will potentially double cancellation rates as the vessel is operating 24/7 and has no spare time to 'catch up' 2 hours 40 minutes.- What will be the impact on IOMSPC reputation/revenues? - What will be the impact on IOM retailers, hospitals, business supplies, etc. etc. etc? From the reduction in reliability of supply?- IOM Chamber of Commerce highlighted their concerns to the developers almost a year ago - why hasn't the developer consulted with IOM businesses/retailers? Table 18.95 Reference implies that that further work is required to address the Navigation/manoeuvring space issue for shipping ("Navigation corridors") in Chapter 12, but IOMSPC notes that additional deviations on top of the WoDs deviations remain impractical due to time constraints. Both Chapter 12 and 18 completely ignore the combined deviation from WODs/Morgan and the primary negative impact would be the severe negative impact to the 'end user' in Isle of Man when goods are no longer delivered, due to insufficient turnaround time and/or increased weather cancellations, i.e. not just manoeuvring space issues.</p>	<p>The Applicant notes your response. However this extract refers to the Morgan Offshore Wind Project Generation Assets Preliminary Environmental Information Report. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_023_047_020 623	<p>12.10.4.7</p> <p>Given these percentages, and a review of operator schedules and constraints, an estimate can be made for the number of additional services cancelled due to navigating a longer route around the cumulative projects:</p> <ul style="list-style-type: none"> Isle of Man Steam Packet route between Liverpool to Douglas: A base case estimate of 26 sailings cancelled would increase to 35 sailings cancelled with the cumulative projects. Isle of Man Steam Packet route between Heysham to Douglas: A base case estimate of 23 sailings cancelled would increase to 30 sailings cancelled with the cumulative projects. <p>IOMSPC comment – This estimation is baseless and speculative. As previously noted, the IOM Met Office estimate strong wind/adverse weather up to 40% of the annual weather condition experience in the Irish Sea. This means a considerable percentage of the sailing will have some degree of weather routing and subject to the magnitude of the adverse weather. Absence of some of alternative weather routing through the area will increase level of cancellation directly (unable to achieve save passage), indirectly (unable to do two return trip per day due to increase crossing time created by the diversion).</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_023_048_020 623	<p>“Next Steps</p> <p>Consideration of Economic Impact Scenarios The PEIR identifies the levels of uncertainty at the pre-consenting stage, particularly in terms of location of expenditure. In addition to the ‘Central’ economic impact scenario assessed as part of the PEIR, ‘Low’ and ‘High’ impact scenarios will be explored as part of the DCO Application. Consideration of potential indirect impacts. The PEIR has identified the following potential impacts which may result in indirect effects on socio-economic receptors. These are described below, with an indication of how these potential indirect impacts will be considered within the socio-economics assessment of the Environmental Statement. Potential socio-economic effects relevant to the Isle of Man</p> <p>The PEIR identifies potential significant effects on shipping and navigation receptors for the individual and cumulative assessments, see volume 2, chapter 12: Shipping and navigation of the PEIR. The Applicant has made firm commitments to reducing the potential impacts on shipping and navigation receptors and the potential significant effects that have been identified as part of the individual and cumulative shipping and navigation assessment. These will be tested</p>	<p>The Applicant notes your response. However this extract refers to the Morgan Offshore Wind Project Generation Assets Preliminary Environmental Information Report. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>and applied as part of the assessment post PEIR and included in the Environmental Statement which will be submitted for the DCO application. The commitments focus on changes to the boundary and layout design of the Morgan Array Area and are set out in Table 18.95: Commitments made to address potential significant effects on shipping and navigation below. Commitments made to address potential significant effects on shipping and navigation”.</p>	
<p>MOR_023_049_020 623</p>	<p>18.14.2.4 The Applicant is continuing to work with stakeholders to assess these commitments, together with other potential risk control options, to ensure they are appropriate and adequate in reducing the risks and, therefore, potential effects that have been identified. The results of this work will inform the Socio-economics assessment for the DCO application.18.14.2.5. Given the potential for indirect impacts on the Isle of Man as a result of potential cumulative shipping and navigation impacts to commercial operators (including strategic routes and lifeline ferries), an assessment of any potential indirect impacts will be brought into the socio-economics assessment for the Environmental Assessment once further work has been undertaken to assess the commitments made by the Applicant on shipping and navigation (presented in volume 2, chapter 12: Shipping and Navigation of the PEIR and summarised in Table 18.95 above).18.14.2.6The following process will be followed during preparation of the Environmental Statement for the DCO application:• Review of the shipping and navigation assessment for the Environmental Statement and identification of any significant adverse effects as a result of potential impacts to commercial operators including strategic routes and lifeline ferries.</p> <p>Where effects are deemed significant, the Socio-economics chapter in the Environmental Statement will include an assessment of the potential indirect socio-economics effects on the Isle of Man ”IOMSPC comment - Morgan as positioned will lead to a disruption to lifeline supply to a remote Island community (from trailers left in Heysham, and significantly increased weather cancellations,) and the Socio-Economic study will need to consult and assess the negative impact on over 400 individual businesses/organisations, e.g. including· Negative impact on TT· Impact on MGP· Impact on other special events, car rallies etc.· Impact on tourism numbers, IOM tourism economy· Impact on IOM retailers/businesses/public services from trailers left in Heysham due to combined Wods/Morgan , reduced turnaround time,· Impact on IOM businesses from increased cancellations due to lack of timely/practical weather routing options (2 hours 40 minutes cumulative per day would lead to a cancellation· Impact to IOMSPC reputational</p>	<p>The Applicant notes your response. However this extract refers to the Morgan Offshore Wind Project Generation Assets Preliminary Environmental Information Report. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>loss, leading to reduction in passengers, e.g. Heysham route would remain viable with a modest reduction, but Liverpool route is commercially vulnerable to any reduction in traffic.</p>	
<p>MOR_023_050_020 623</p>	<p>Note on Records : NRA Simulation Arrangement by Nash Maritime The developers & their NRA Consultants are well aware that during the annual Tourist Trophy (TT) fortnight on the Isle of Man that there is an exceptional level of demand, and many sailings are completely full. The Company carries as many vehicles during this TT fortnight as are typically carried in the previous three months, extra fast craft sailings are scheduled overnight, all officers are rostered, extra crews are recruited, retired Masters also assist, and leave, etc, is not permitted. IOMSPC has made it perfectly clear that the windfarms as proposed are a safety hazard and diversions are completely unacceptable for a lifeline service to a remote Island community. We need to be present at Hazard Workshops and have made it clear that all staff are rostered during the TT - The only way to attend a Workshop during this short period would have been to cancel scheduled sailings. IOMSPC maintains a lifeline service. We requested that the Hazard Workshop arranged for 12-14 June was rearranged to allow us to attend and to date this request has been ignored. We maintain it essential this is rearranged.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following engagement with the Isle of Man Steam Packet Company (IoMSPC), the simulation was rescheduled to a suitable time and to accommodate the attendance of the IoMSPC.</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_024_001_020 623	<p>Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16) Spirit Energy Production UK Limited is committed to continuing to work with Morecambe Offshore Windfarm Limited to share information to assist with the planning and development process in relation to Offshore Windfarm Limited, proposed wind farm development. However, it should be recognised that the wind farm licence award area directly overlaps, and is otherwise proximate to, existing operational infrastructure constructed pursuant to current petroleum licences which necessitates limitations and/or restrictions on where turbines may be installed.</p>	<p>Throughout the development of the Project, the Applicant has held regular engagement with Spirit Energy and the Applicant would seek to continue this engagement with Spirit Energy as the development of the Project continues.</p> <p>The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform. Buffer zones around existing infrastructure (including a 1.5nm separation radius between platforms and WTGs/ OSPs) are identified and assessed within the ES. Please refer to Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) and Chapter 14 (Document Reference 5.1.14).</p>
MOR_024_002_020 623	<p>The communicative, collaborative, and engaging approach seen to date is encouraging and Spirit Energy Production UK Limited plans to continue to work with Offshore Wind Limited in a solution focussed manner to seek an outcome that supports co-existence to safe execution of all activities in the area throughout construction, operation, maintenance, and decommissioning phases of all operations. In an effort to understand the potential impact on Spirit's operations, Spirit continues to be in open communication with OWL including via monthly meetings (following OWL award of preferred bidder status in early 2021) and through the Maritime Navigation Engagement Forum (MNEF). Spirit takes this opportunity to reiterate that thorough consideration must be given to the impact on Spirit, operations to ensure the uninterrupted and safe execution of all operations and obligations in the area including, but not limited to, the impact of marine and aviation movements on its petroleum licence obligations. As supported by the conclusions drawn from the desktop gas field interaction desktop study and HAZID (Hazard identification) workshop in March 2023, further studies and work are required to understand the proposed development, including to determine suitable turbine locations and appropriate marine and aviation requirements. Spirit welcomes the collaborative and engaging approach OWL has taken throughout the planning and development of its project to date and looks forward to continued collaboration and engagement with OWL to evaluate the proposed development of an integrated energy mix in the East Irish Sea area.</p>	<p>Throughout the development of the Project, the Applicant has held regular engagement with Spirit Energy and the Applicant would seek to continue this engagement with Spirit Energy as the development of the Project continues.</p>
MOR_024_003_020 623	<p>Q4: Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm?</p> <p>Wind Farm construction between 2026 and 2028 will require careful management alongside other ongoing activities in the area due to increased level of marine and aviation activity and traffic being introduced to the area resulting in increased risks including in relation to congestion, collision, and adverse effects on communications. All parties will have to work together to ensure risks are minimal and mitigated throughout the construction phase. The increased activity</p>	<p>The Applicant notes your response.</p> <p>Throughout the development of the Project, the Applicant has held regular engagement with Spirit Energy, including Sprit Energy's participation in Hazard Workshops, MNEF and meetings to inform the Navigation Risk Assessment and Cumulative Regional Navigation Risk Assessment undertaken. The Applicant would seek to continue this engagement with Spirit Energy as the development of the Project continues.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>level during the construction phase will not only increase the amount of marine and aviation traffic, but it will also increase non-routine activities in the area. This poses a higher risk of collision and other negative safety and operational impacts due to increased congestion and impaired communications. Spirit Energy Production UK Limited would hope that through early identification of these, and joint participation in HAZID (Hazard identification) workshops, all additional risks could be identified, and management plans developed between the parties to mitigate such risks. Spirit would like to maintain open and transparent communications with Offshore Wind Limited to fully understand the increased marine and aviation activities in the area during construction in order that all parties can ensure safe operations of existing infrastructure alongside safe construction of the wind farm.</p>	
<p>MOR_024_004_020 623</p>	<p>With this increased level of activity in the area there will be considerable simultaneous operation planning required between existing infrastructure owner activities and wind farm development activities and Spirit) will continue to work openly with OWL to share information. Spirit is keen to understand whether OWL has a process or plan that will enable effective sharing of activity plans with the many area users to understand additional requirements being placed upon them and whether this requires additional resourcing, by when, and at what incremental cost.</p>	<p>Throughout the development of the Project, the Applicant has held regular engagement with Spirit Energy. The Applicant will continue this engagement with Spirit Energy as the development of the Project continues, including coordination of construction and operation activities.</p>
<p>MOR_024_005_020 623</p>	<p>Spirit will also require further understanding of the construction methodology to understand potential impact of turbine location, installation zones and where they will be located in relation to existing infrastructure and their subsequent impact on the movement of Platform Supply Vessels ('PSVs') and Emergency Rescue and Recovery Vessels ('ERRVs') and general increased activity in the area.</p>	<p>The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform. Buffer zones around existing infrastructure (where WTGs and OSPs would not be located) are identified and assessed within the ES. Please refer to Chapter 14 (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information</p> <p>Engagement is ongoing with Spirit Energy on the terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness.</p>
<p>MOR_024_006_020 623</p>	<p>Cable installation plans will need to be understood further as part of the separate transmission assets consultation to determine any impact and mitigating measures required to manage between the parties. These will depend on where the cables and trenches are planned to be situated alongside the work entailed such as relocation of any boulders/debris and/or if the cables are to cross, or be in proximity to, any existing infrastructure.</p>	<p>The Applicant notes your comment. However, as this for the Morgan and Morecambe Offshore Wind Farm: Transmission Assets project, the Applicant has no further comment.</p>
<p>MOR_024_007_020 623</p>	<p>In addition, construction methods such as piling may disrupt the seabed, and thus, impact any existing infrastructure in the area. Spirit expects open communications will continue in order for methodology and potential impacts to be discussed as plans develop and that preparatory work by OWL, such as seabed surveys pre and post construction, will assist existing infrastructure owners to determine</p>	<p>Engagement is ongoing with Spirit Energy on the terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>whether any remedial work is required as a direct result of the wind farm development. It is anticipated that such requirements and associated liability for any such work will be detailed in co-existence and co-operation agreements prior to work commencing.</p>	
<p>MOR_024_008_020 623</p>	<p>There are other elements of the construction plans that are not yet articulated, such as quayside, port, and aviation bases, that it will also be important for Spirit to understand in order to determine further impacts on marine and aviation traffic and potential congestion that may subsequently impact the ability of petroleum licence holders, such as Spirit, to perform routine operations. Spirit looks forward to consultation in this regard once such plans have been developed.</p>	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection and heliport selection will be made post consent. We will continue to engage with Spirit Energy as further details are defined.</p>
<p>MOR_024_009_020 623</p>	<p>Q5: Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes etc. The introduction of new activities into the area will increase the aviation and marine traffic movements in the area and this increased level of marine and aviation activity will result in an increased risk of congestion, collision and adverse effects on communications when coupled with the displacement of traffic and re-routing of commercial and leisure traffic may increase the risk of traffic operating closer to the existing infrastructure.</p> <p>Spirit Energy Production UK Limited ("Spirit") wishes to remain part of the Maritime Navigation Engagement Forum ("MNEF") to understand the outcomes of the cumulative effects of increased turbines and traffic in the area altering existing marine channels and work being undertaken by the wind farm developers to mitigate any negative impacts on existing area activities.</p> <p>As plans develop and further information becomes available to Spirit, this will require ongoing careful consideration.</p>	<p>Details of the Project aviation and shipping and navigation assessments are presented in Chapter 14 Shipping and Navigation (Document Reference 5.1.14), Appendix 14.1 (Document Reference 5.2.14.1), Appendix 14.2(Document Reference 5.2.14.2) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).</p> <p>As part of the embedded mitigation, the MNEF would continue to facilitate information sharing and identification of additional risk controls.</p> <p>Engagement is ongoing with Spirit Energy on the terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness.</p>
<p>MOR_024_010_020 623</p>	<p>Q6: Do you have any comments on anything else within this consultation? Routine Operations and Maintenance ,It is not clear at present how routine maintenance of the wind farm will be managed although it is envisaged that it will result in increased marine and aviation traffic. Inspection and maintenance on existing infrastructure will require a minimum of 500m either side of pipelines and cables including those not been fully decommissioned.</p>	<p>An Outline Offshore Operations and Maintenance Plan (Document Reference 6.6) has been submitted as part of our application. The plan will be discharged post consent following consultation with the appropriate stakeholders.</p> <p>Buffer zones around existing infrastructure (including a 500m separation either side of pipelines and cables where WTGs/ OSPs will not be located) are identified and assessed within the ES. Please refer to Chapter 14 (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).</p>
<p>MOR_024_011_020 623</p>	<p>Aviation ,Offshore Wind Limited has shared to date that it is planning for a 1.5 nautical mile radius around each platform free of turbine installation. Initial findings of the OWL Gas Infrastructure Interaction study and the HAZID workshop concluded that further work is required</p>	<p>The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform. Buffer zones around existing infrastructure (including a 1.5nm separation radius between platforms and WTGs/ OSPs) are identified and assessed within the ES. Please refer to Chapter</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>to fully define the impact and aviation requirements in relation to turbine planning. Spirit Energy Production UK Limited has undertaken some initial work, along with Harbour Energy, the owner of the nearby Calder platform, and it has been determined that there is a requirement for a minimum of 3.3 nautical mile radius of unobstructed airspace around each offshore facility/platform to ensure safe helicopter operations. Each facility/platform will also require a straight unobstructed 2 nautical mile wide corridor oriented into prevailing wind and extending from the center of the facility/platform to a distance of 7 nautical miles. It is a requirement for Spirit to fly between the CPP1 South Morecambe platform and the nearby Normally Unmanned Installations to maintain operations on a daily basis with flights operating in all environmental conditions between: (i) the mainland to offshore installations; and (ii) offshore installation to offshore installation.</p>	<p>17 Infrastructure and Other Users (Document Reference 5.1.17) and Appendix 17.1 Helicopter Access Study (Document Reference 5.2.17.1) for further information.</p>
<p>MOR_024_012_020 623</p>	<p>Spirit recognises the work undertaken by OWL to date and that further work is required between both parties to develop a layout plan that doesn't impact Spirit's ability to conduct safe commercial aircraft transport operations to and from offshore helidecks ensuring full compliance with the Health and Safety Executive Prevention of fire and explosion, and emergency response on offshore installations regulations. An assessment on the impact of new turbine installations in the area on Offshore Search and Rescue (SAR) operations will also be required. For both day and night conditions and that the wind turbine spacing and distance from wind turbines to offshore helidecks should demonstrate effective ability to recover casualties with the use of Search and Rescue aircrafts from the water and from existing offshore facilities/platforms.</p>	<p>The Applicant has been in regular engagement with Spirit Energy throughout the development of the Project, to date.</p> <p>The Helicopter Access Study (Document Reference 5.2.17.1) shows that future access to some oil and gas platforms would be impacted by the presence of wind turbine generators (WTGs). Whilst this would be a logistical impact on the operator, Search and Rescue (SAR) access would remain unaffected.</p> <p>The layout of the windfarm site would be finalised post-consent, and the Applicant is continuing to engage with Spirit Energy on terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness (as further discussed in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) and in Chapter 16 Civil and Military Aviation and Radar (Document Reference 5.1.16)).</p>
<p>MOR_024_013_020 623</p>	<p>Cumulative impact of increased marine traffic. The introduction of new activities into the area will increase the aviation and marine traffic movements in the area and this increased level of marine and aviation activity will result in an increased risk of congestion, collision and adverse effects on communications when coupled with the displacement of traffic and re-routing of commercial and leisure traffic may increase the risk of traffic operating closer to the existing infrastructure.</p>	<p>The Helicopter Access Study (Document Reference 5.2.17.1) shows that future access to oil and gas platforms would be restricted by the presence of wind turbine generators (WTGs). This would be a logistical impact on the operator and there would be no safety impact.</p> <p>Consultation with Spirit Energy has been undertaken, which is continuing as layout designs are developed. The Applicant is in discussion in relation to impacts to operations as part of coexistence plans (as further discussed in Chapter 17 Infrastructure and Other Users of the Environmental Statement (Document Reference 5.1.17)). Impacts to routing, collision and allision risk are assessed in Section 14.7. Existing oil and gas activities and requirements are considered in Section 14.5.</p> <p>Future oil and gas decommissioning activities are considered in Section 14.6 in Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14). An Outline Vessel Traffic Management Plan (Document Reference 6.9) has been submitted as part of our application. This will enable sharing of</p>

Unique Reference Identifier	Consultation response received	Applicant response
		information with other marine users in the area. The plan will be discharged post consent following consultation with the appropriate stakeholders.
MOR_024_014_020 623	Communications - Radar Early Warning System (REWS) effectiveness is frequently negatively impaired by the construction and placement of the wind turbines. Proximity of the wind turbines to the existing Oil and Gas infrastructure impairs the efficiency and functionality of the existing Radar Early Warning System for detection of vessels and warning time required by the offshore fixed installation which is a statutory requirement. Further assessment of the radar 'blind sectors and additional means for the traffic monitoring will be required to ensure Spirit compliance with the PFEER regulations.	The Applicant has undertaken a Radar Early Warning System (REWS) assessment which is provided in Chapter 17 Infrastructure and Other Users of the Environmental Statement (Document Reference 5.1.17) and Appendix 17.2 REWS Technical Report (Document Reference 5.2.17.2), noting the effects are assessed as low and manageable without the need for mitigation measures beyond those embedded.
MOR_024_015_020 623	Emergency response - As development progresses, Spirit would like to understand the emergency response impact due to increased activities and infrastructure in the area and how Spirit's existing emergency response plans and safety case are impacted by the introduction of these new activities. It will also be necessary for Spirit to have sight of OWL's emergency response plans in order that Spirit and OWL can be clear both plans can co-exist together in proximity. There will be specific elements of emergency response that must be considered alongside the turbine layout and spacing such as ability react to any emergency and understand which party shall have primacy. Emergency escape and evacuation from the Spirit assets needs to be considered to understand any impacts there could be on the ability of the ERRV to provide direct assistance in coordinating escape and evacuation, including potential retrieval of personnel.	<p>Details of the consultation undertaken as part of the Cumulative Regional Navigation Risk Assessment (CRNRA) are presented in Appendix 14.2 (Document Reference 5.2.14.2).</p> <p>An Emergency Response and Cooperation Plan (ERCoP) would be drafted post-consent, and lines of communication has been established with other operators in the region including Spirit Energy. The Applicant is continuing to engage with Spirit Energy on the terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness (as further discussed in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17)).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_024_016_020 623	Decommissioning - In order to fulfil decommissioning obligations, all production platform jackets and topsides will be removed, wells plugged and abandoned and pipelines will be re-purposed or cleaned, cut, and left in situ. Heavy lift vessels and rigs will require 1.5 nautical mile (2.8km) radius around platform to allow manoeuvring into position and a 1 nautical mile (1.8km) access/egress corridor. Spirit's DP3 and DP4 platforms are planned to be decommissioned and removed prior to turbine installation in 2026 although pipelines may still require to be surveyed and therefore will require 500m clearance either side.	The Applicant notes your response.
MOR_024_017_020 623	Execution of governing framework - Both parties will have to agree a governing framework on how parties shall execute construction, operate their infrastructure within the area, clarify zones, define marine and aviation requirements, and mitigate any identified risks. This is an important construct in mitigating the increased risk being introduced to the area through the development of new infrastructure.	<p>The Applicant is in discussion with Spirit Energy in relation to impacts to operations as part of coexistence plans (as further discussed in Chapter 17 Infrastructure and Other Users of the Environmental Statement (Document Reference 5.1.17)).</p> <p>Engagement is ongoing with Spirit Energy on the terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness.</p>
MOR_024_018_020 623	Carbon storage licence - Spirit has been granted a carbon storage licence by the North Sea Transition Authority (NSTA) to develop the South and North Morecambe reservoirs into carbon stores. With due consideration of the requirements of both the wind farm and the carbon storage site, the carbon store can be developed, monitored, maintained, and co-exist with the existing and planned wind farms in the East Irish Sea Area. Whilst at present further engineering works are required, it can be assumed that new infrastructure may be situated in a similar location to where the South Morecambe CPC1 platform is currently situated, and that heavy lift construction vessels and rig access would be similar to the heavy lift and rig access required to decommission existing petroleum licence infrastructure.	<p>The Applicant is in discussion with Spirit Energy in relation to impacts to operations as part of coexistence plans (as further discussed in Chapter 17 Infrastructure and Other Users of the Environmental Statement (Document Reference 5.1.17)).</p> <p>Engagement is ongoing with Spirit Energy on the terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness.</p>
MOR_024_019_020 623	Spirit Energy Production UK Limited ("Spirit") has been participating in the Maritime Navigation Engagement Forum ("MNEF") and will remain involved to understand the cumulative impact of increased vessel activity to construct and maintain the wind farm in addition to the introduction of new turbine structures resulting in displacement of existing traffic. Spirit would like to understand the impact that the vessel movement changes to the area will have specifically on existing operations as wind farm plans develop and further information becomes available. This will require ongoing careful consideration to assess operational risks, understand collision risk and mitigate to prevent and ensure additional hazards are not introduced to the existing area infrastructure.	<p>As part of the embedded mitigation, the MNEF would be to facilitate information sharing and identification of additional risk controls.</p> <p>Vessel Traffic Management Plan (VTMP), with an Outline provided as part of the DCO submission (Document Reference 6.10) been included as embedded mitigation for the Project design to mitigate potential effects on shipping and navigation. Further information can be found in Section 14.3.3 in Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_024_020_020 623	<p>1.11: Infrastructure and other users</p> <p>Spirit is required to undertake helicopter operations between the CPP1 platform and the nearby Normally Unmanned Installations to maintain operations on a daily basis requiring flights to operate in all environmental conditions and at all times between onshore heliport and the offshore installations, and flights between offshore installations. Further work will be required by OWL, Spirit and Harbour Energy to determine airspace requirements to ensure safe Morecambe Hub asset operations and future decommissioning aviation requirements and whether these can be upheld with the introduction of obstacles in the area of the OWL windfarm array. As plans develop and further information becomes available to Spirit, this will require ongoing careful consideration to assess operational risks including in respect of the requirement for 24-hour emergency access and ensure additional hazards are not introduced to the existing area infrastructure.</p>	<p>The Helicopter Access Study (Document Reference 5.2.17.1) shows that future access to some oil and gas platforms would be impacted by the presence of wind turbine generators (WTGs). Whilst this would be a logistical impact on the operator, Search and Rescue (SAR) access would remain unaffected.</p> <p>The Applicant has been in regular engagement with Spirit Energy throughout the development of the Project, to date.</p> <p>The Applicant is continuing to engage with Spirit Energy on terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness (as further discussed in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) and in Chapter 16 Civil and Military Aviation and Radar (Document Reference 5.1.16)).</p>
MOR_024_021_020 623	<p>1.16 Traffic and Transport</p> <p>Spirit has shared minimum requirements that must be given consideration prior to finalising development plans and that further studies will be required to determine impact on the Radar Early Warning System, marine movements, and aviation.</p> <p>Minimum requirements shared to date; 500m exclusion zone around all oil and gas production platforms. 500m either side of pipelines/cables to inspect and repair. Vessel passing distance/transit corridor of at least 1 nautical mile from each facility. 1 nautical mile corridor East/West of each platform to allow PSV and ERRV access and a 1 nautical mile corridor between Calder and CPP1. Decommissioning vessels and rigs require a minimum of 1 nautical mile corridor to access the platforms, an approach from both East and West of the CPP1 platform and a minimum of 1.5 nautical mile radius around each platform to allow to manoeuvre into position.</p>	<p>The location of the Project windfarm site was selected with coordination and coexistence with other activities, developers and operators in mind. The Project has been engaging with Spirit Energy since 2019.</p> <p>The impacts around helicopter platform access and REWS have been further assessed since PEIR and are considered in Section 17.6 in Chapter 17 Infrastructure and Other Users (5.1.17) and in detail in Appendix 17.1 (Document Reference 5.2.17.1) and 17.2 (Document Reference 5.2.17.2).</p> <p>The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform. Buffer zones around existing infrastructure (where WTGs and OSPs would not be located) are identified and assessed within the ES. Please refer to Chapter 14 (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information</p> <p>Engagement is ongoing with Spirit Energy on the terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness.</p>
MOR_025_001_020 623	<p>Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>I'm pleased to support this application. I'm an elected Green Party councillor on Lancaster City Council, and I feel that it is vital that we increase our wind generation capacity to address the Climate Emergency. I am aware that there is evidence that the Walney Island array has had a positive impact on marine wildlife and has also given a way for local fishermen and women to earn an income by taking tourists out to see the wildlife that are sheltered by the turbines - I hope that there will be similar benefits associated with this development.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_026_001_020 623	Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the possible community benefits of Morecambe Offshore Windfarm, and how the project can support No money will be put into the local community. As chairman of the morecambe bay fishermans association, when Dong energy first came to the area they helped local fishing business with thousands of pounds. Where are these local benefits now?	The Applicant notes your comments. The potential benefits of the Project are set out in each of the Environmental Statement Chapters. The Applicant would like to draw attention to the potential benefits detailed in Chapter 20: Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20). Additionally, the Outline Fisheries Liaison and Co-existence Plan (Document Reference 6.3), submitted with the DCO application, includes the process for justifiable evidence-based disturbance payments subject to the provision of suitable evidence as within FLOWW guidance.
MOR_026_002_020 623	Q4 Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm? Construction is all well and good, what about the deconstruction at the end of the life!	The Environmental Statement assesses impacts throughout the lifetime of the Project, including decommissioning. For commercial fisheries decommissioning impacts are considered to be similar to construction impacts, which were found to be significant, requiring additional mitigation to reduce the residual impact to minor.
MOR_026_003_020 623	Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes etc. It will ne terrible for the commercial fisheries. All fish in the bay migrate into the area during summer months, bass, mullet , hounds, salmon, seatrout, cockle spat . This will be anouther barrier for their migration	Migration of fish species (and barrier effects) are considered within Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). The potential for barriers to migration is also assessed in Chapter 13 Commercial Fisheries (Document Reference 5.1.13) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).
MOR_026_004_020 623	Q6 Do you have any comments on anything else within this consultation? Please apply these responses to all the consultation feed backs for all of the projects for morecambe. We don't want then. We don't need them, there will be no benefit to any local community and it is just big buisness and big money for big businesses. Struggling to see how this is a consultation when work on the surveying of the mona and morgan has been ongoing for the last 2 years. Decisions have allready been made and this is just a PR campaign	The Applicant notes your comments. The potential benefits of the Project are set out in each of the Environmental Statement Chapters. The Applicant would like to draw attention to the potential benefits detailed in Chapter 20: Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20). Statutory consultation is a key part of the planning and DCO application process. The Applicant takes consultation and engagement seriously to understand the views from stakeholders and communities. The examination process also provides further opportunity for stakeholders to register as an interested party and have their views heard. The Applicant has submitted a Consultation Report (Document Reference 4.1) that explains how the Applicant has complied with the consultation requirements as set out in the Planning Act 2008 and had regard to all the feedback submitted.
MOR_026_005_020 623	Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)? As a once over lune saloon drift nets man that has now been banned from the trade due to saloon stocks and mismanagement of the Environment Agency, what studies have been carried out into the effects of migratory species. This will have a detrimental effect on the navigation of the migratory fish. 10 livelihoods have been lost allready	Migration of fish species (and barrier effects) are considered within Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10).

Unique Reference Identifier	Consultation response received	Applicant response
	<p>due to reduced salmon stocks and these farms will have an even further negative effect on these iconic species.</p>	
<p>MOR_026_006_020 623</p>	<p>Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>These farms are taking over the Irish sea, as a commercial fisherman they will be detrimental to the fisheries within the bay, the bay itself will become a dead zone. The cockle industry alone l'd worth many millions of pounds, what studies have been done regarding the effects om the drift and settlement of the cockle spat.</p>	<p>Potential effects to fish and shellfish have been assessed within Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10) and Chapter 13 Commercial Fisheries (Document Reference 5.1.13), with no significant effects following mitigation for the Project alone. Furthermore, no significant effects were also identified for coastal processes or water quality as identified in Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7) and Chapter 8 Marine Sediment and Water Quality (Document Reference 5.1.8)</p>
<p>MOR_026_007_020 623</p>	<p>Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>This will add thousands of pounds to the shipping industry having to deviate from there current tracks, adding to the co2 emissions. This is not green technology!</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health</p>

Unique Reference Identifier	Consultation response received	Applicant response
		(Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_026_008_020 623	<p>Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>A blot on the horizon.</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18 Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_026_009_020 623	<p>Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>The long term socioeconomics of three projects will be detrimental to the local fishing fleets.</p>	<p>Potential effects have been considered cumulatively and presented in Chapter 20 Socio Economics (Document Reference 5.1.20).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_026_010_020 623	<p>Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Will be negative, they are not a green technology</p>	<p>Generation of energy from renewable sources has been recognised by the UK government as fundamental to UK energy policy and development of a low-carbon economy. The Clean Growth Strategy (Department for Business, Energy and Industrial Strategy (BEIS), 2017) outlined the UK government's goals to develop industries which are key to economic development, whilst simultaneously reducing the emission of greenhouse gases (GHG), offshore wind is recognised as having a beneficial impact towards both goals. This contributed to the commitment within the Sector Deal (HM Government, 2019) to increase offshore wind capacity.</p> <p>By 2030 the aim is to produce 40GW of offshore wind (a target increased to 50GW of offshore wind generated electricity in the British Energy Security Strategy (BESS), 2022). This ambitious net zero target will only be met by the crucial contribution from the offshore wind industry and is a substantial increase from the 14GW of offshore windfarms either fully commissioned or under construction, as of March 2021 (Gray, 2021).</p> <p>Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.</p>
MOR_027_001_020 623	<p>PUBLIC CONSULTATION – MORECAMBE OFFSHORE WIND FARM</p> <p>Thank you for consulting Lancaster City Council regarding the above proposed development. Following consideration by the Council Business Committee on 1 June 2023, I can confirm that the City Council is supportive of the Morecambe Offshore Wind Farm proposals. We consider that the project will deliver significant benefits in the country's ambitions to reduce greenhouse gas emissions to reach Net Zero. It would make use of an area of coastline that already accommodates offshore wind turbines and would thus be unlikely to be harmful to public amenity. We agree that the impacts described in the supporting literature are capable of being managed appropriately. Lancaster City Council would request that it is consulted again, should the proposals be subject to further amendment.</p>	<p>The Applicant notes your response.</p> <p>Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.</p>
MOR_028_001_020 623	<p>Statutory Consultation under Section 42 of the Planning Act 2008 and Regulation 13 of Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. Thank you for your consultation dated 19 April 2023 requesting our advice on the Preliminary Environmental Information Report (PEIR) submitted in support of the Morecambe Generation Assets Offshore Wind Farm Project. Natural England are content to provide comments on the PEIR, however this is without prejudice to any comments we may wish to make in light of further submissions or on the presentation of additional information. The following Documents have been reviewed:</p> <ul style="list-style-type: none"> • Volume 1: PEIR Chapters • Volume 2: Supporting Appendices 	<p>The Applicant notes your response.</p> <p>A Statement of Common Ground (SoCG) was developed by the Applicant. However, Natural England (NE) took the decision to not engage with a SoCG. With the submission of ETG agreement logs, examination Principal Areas of Disagreement and their Risk and Issues log, it was considered there would be limited need for a SoCG.</p> <p>Discussions held with NE through the Evidence Plan Process and ETGs, including meeting notes, and agreement logs is presented in Consultation Report Appendices Part 1 (A to C) (Document Reference 4.1.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>• Volume 3: Figures1. Overview Comments</p> <p>Natural England's Remit Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development. Natural England's remit extends out to 12nm. Pursuant to an authorisation made on the 9th December 2013 by the JNCC under paragraph 17(c) of Schedule 4 to the NERC Act 2006, Natural England is also authorised to exercise the JNCC's functions as a statutory consultee in respect of applications for offshore renewable energy installations in offshore waters (12-200nm) adjacent to England. Evidence Plan Process Natural England recognises the importance of the pre-application stage of the consenting regime, and we welcome the opportunity to engage at this stage. As such we seek to make this process as effective as possible. We have provided advice previously in our response to the Environmental Impact Assessment Scoping Report (21 July 2022, NE ref: 18251/ 399738). Since Scoping, Natural England has been engaging in the Applicant's Evidence Plan Process (EPP) and Natural England has attended the majority of the relevant Expert Topic Group (ETG) meetings. . We recommend that a Statement of Common Ground (SoCG) is started by the Applicant early within the EPP, to accurately catalogue all areas of agreement for the project and highlight any areas of disagreement. ETG consultation/agreement logs have been successfully used by other projects as the foundation for the SoCG. Due to the high quantity of large Documents submitted as part of the PEIR and due to the limited consultation period we have reviewed the Documents as fully as possible, however there have been instances where we have had to prioritise which Documents to review. We have summarised which Documents have been reviewed in relation to each of the relevant thematic annexes. We therefore reserve the right to provide further advice and highlight that agreement is not to be assumed where no comment is made. Although this means that it is unlikely that Natural England has been able to fully identify all of the potential areas of concern relating to the Morecambe Generation Assets project, our advice highlights early indications of a number of notable areas of concern at this stage. However, we would like to stress that this should not be considered a complete assessment. "Best Practice Advice for Offshore Wind Natural England has produced a series of Documents to provide Environmental Assessments: Best Practice Advice for Evidence and Data Standards for offshore wind farm development in English inshore and offshore waters. The advice is provided in a series of Documents which range from baseline characterisation surveys and</p>	

Unique Reference Identifier	Consultation response received	Applicant response
	<p>pre-application engagement, through to expectations at application and post-consent monitoring. The project is divided into four phases:</p> <ul style="list-style-type: none"> • Baseline characterisation surveys • Pre-application engagement and the evidence plan process • Data and evidence expectations at examination • Post-consent monitoring and other environmental requirements. The above link also provides access the Nature Conservation Considerations and Environmental Best Practice for Subsea Cables for English Inshore and UK Offshore Waters. This project provides Natural England and JNCCs joint environmental best practice advice for subsea cable projects in English inshore and UK offshore waters. 	
MOR_028_002_020623	<p>It is the expectation that developers follow our Best Practice through the application and consenting process. As such our advice and recommendations to the PEIR are framed around this advice. If you have any issues using SharePoint Online, please contact the site owners or contact: NEOffshoreWindStrategicSolutions@naturalengland.org.uk. Natural England has also produced terrestrial guidance 'Developers: get environmental advice on your planning proposals' which is also relevant to the onshore transmission assets for offshore windfarms please follow the links to our standard advice. Matrix to Determine Effect Significance. We acknowledge that a matrix approach to determining the significance of effects on ecological features is commonly used. However, this method often relies on value- rather than evidence-based judgements. The subjective evaluation of magnitude of impact and sensitivity/importance of receptors through expert judgement has led to many impact magnitudes and receptor importance/sensitivities being downgraded across topics in the PEIR. We also note that any effect that is concluded to be of moderate or major significance in the PEIR, is deemed to be 'significant' in EIA terms, whereas effects concluded to be of negligible or minor significance, are deemed 'not significant' within the PEIR and "unlikely to be important in the decision making process". This cut-off could exclude any effect concluded to be less than moderate, which in turn could lead to errors in assessing cumulative effects, which are a key consideration in decision making, adequately. Natural England's Structure/Framework for Attributing Risk. The comments provided within this letter and its Annexes have been colour coded using the structure/framework as specified in the risk table in Appendix 1 of this letter. In this letter, the coloured headings are coded based on the highest risk associated with the topic in question. Natural England would like to highlight that at this stage all comments highlighted as yellow, amber, or red need to be addressed, with the</p>	<p>The Applicant notes your response.</p> <p>Engagement with NE through the Evidence Plan Process (EPP) and ETGs, were held to address the comments in their feedback. The Applicant has presented data once available, allowing NE to better understand the Project's assessment process and data sources for the ES. EPP and ETG meeting notes and agreement logs are presented in Consultation Report Appendices Part 1 (A to C) (Document Reference 4.1.1).</p> <p>The Applicant has followed standard EIA methodology as presented in Chapter 6 EIA Methodology (Document Reference 5.1.6).</p> <p>A separate consent for the Transmission Assets associated with the Morecambe Offshore Windfarm and the Morgan Offshore Wind Project (Morgan and Morecambe Offshore Wind Farms: Transmission Assets) will be sought.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	potential for these issues to become more significant if not resolved at application.	
MOR_028_003_020 623	<p>2. Impacts on the Natural Environment – Natural England’s Key Concerns</p> <p>Marine Geology, Oceanography and Physical Processes and Marine Sediment and Water Quality NE’s preferred approach would be to use modelling that is specific to the project being assessed. Whilst justification for use of the conceptual approach is presented, we do not consider this to be an acceptable standard approach. The risk to MPAs of using this approach is somewhat reduced due to the distance to MPAs with benthic features. However, impacts to the conservation objectives for mobile interest features of designated sites cannot currently be excluded. This is reflected in the RAG rating. We recommend that the lower level of confidence implicit in using a nearby project as a proxy is noted so that it may be reflected in future in-combination assessments. We further recommend that monitoring for effects on physical processes should be developed and implemented in discussion with the ETG and that project specific evidence gathering and modelling work should be considered to inform the ES, in order to manage the risk inherent in the conceptual approach.</p>	<p>The conceptual assessment approach applied in the ES assessment has been updated since PEIR to include numerical modelling results from Mona and Morgan, in addition to AyM numerical modelling. Given the available data, including modelling from Mona and Morgan which use a calibrated model that covers the windfarm site, it is considered that the conceptual modelling approach adequately informs the ES assessment. Further justification of this approach was provided in a technical note outlining a more comprehensive conceptual approach to the assessment of physical processes which was issued to the Marine Ecology ETG in August 2023. Natural England responded that the updated proposed conceptual approach provides 'a more appropriate evidence base than Awel-y-Mor alone', and 'presents an improvement to the previous conceptual approach and will result in a better supported ES' (Natural England, 2023). A justification for the conceptual approach is provided in Section 7.4.3.3 in Chapter 7 Marine Geology, Oceanography and Physical Processes. Monitoring for effects on the seabed is outlined in the In Principle Monitoring Plan (Document Reference 6.4)</p>
MOR_028_004_020 623	<p>Benthic Ecology</p> <p>Overall, NE is content with the approach taken and conclusions drawn for Benthic Ecology.</p> <p>We recommend continued use of recent evidence on the effect of noise on benthic communities that may not yet be reflected in NE’s Advice On Operations.</p>	<p>The latest publicly-available evidence has been used to inform the assessments set out in Section 9.6.3.3, Section 9.6.4.7 and Section 9.6.5.4 in Chapter 9 Benthic Ecology of the Environmental Statement (Document Reference 5.1.9).</p>
MOR_028_005_020 623	<p>We further recommend that monitoring for INNS is implemented following construction in order to gauge the effect of the new infrastructure on INNS. Whilst NE agrees with the conclusions of the assessment as set out in PEIR there are several impact pathways which require further consideration as set out in the annex.</p>	<p>Mitigation set out in Section 9.6.4.8 in Chapter 9 Benthic Ecology of the Environmental Statement (Document Reference 5.1.9) includes the potential for INNS monitoring, which would be taken into consideration when developing post-construction inspection surveys of hard substrate. The Applicant has also committed to this in the In Principle Monitoring Plan (Document Reference 6.4), which will be further developed post-</p>

Unique Reference Identifier	Consultation response received	Applicant response
		consent and in consultation with Natural England via the MMO and secured in the draft Deemed Marine Licence.
MOR_028_006_020 623	<p>Fish and Shellfish Ecology</p> <p>Several designated sites from the region are not included in the assessment. However, all the omitted fish designated features have coincidentally been assessed due to their presence within other designated sites which were assessed. The submitted ES should incorporate the designated site features detailed in Annex C into the appropriate assessments. Both shad species (<i>Alosa alosa</i> and <i>Alosa fallax</i>) are omitted from the diadromous fish receptor group, despite being present in the region (non-spawning). Given the species is present in the region, either shad should be included within all assessments of impacts on diadromous fish, particularly underwater noise, or a justification for its exclusion provided.</p>	<p>Whilst shad are present in the region, there is no SAC designated for shad within 100km of the Project, thereby ruling out direct effects on these sites. All worst-case noise impact ranges for fish species are contained within 50km, so there is no pathway for direct impact on SACs designated for shad species. . Whilst adult non-spawning shad may be present at the site, there is no way to apportion individuals to any one SAC river population (or non-designated population). However, shad species are now considered in Chapter 10 Fish and Shellfish of the Environmental Statement (Document Reference 5.1.10) as part of the diadromous fish assemblage (Section 10.5.8). The additional designated sites provided by Natural England have also been assessed and presented in the RIAA (Document Reference 4.9) as requested, together with impacts on migratory shad where relevant as features of European sites within the region.</p>
MOR_028_007_020 623	<p>As noted above, only the first year of survey data has been included in the PEIR. Natural England cannot therefore make any conclusive judgements based on this PEIR and accordingly, our advice focuses on the methodology. The hammer energies referred to in the context of sensitivity testing are notably higher than 5,000 kJ used in the assessment. We therefore seek clarification on what the worst-case scenario (WCS) is. It is imperative that the WCS is assessed given that we will advise that the WCS is conditioned through the deemed Marine Licence (dML).</p>	<p>The full two year survey data has not been included in the assessments. Worst-case scenarios have been accounted for in the Project's design parameters, as detailed in the draft DCO (Document Reference 3.1) and draft Deemed Marine Licence (schedule 6 within the Draft DCO).</p> <p>Assessment for the ES has been updated for the confirmed worst case hammer energy (6,600kJ) and has been presented in Chapter 11 Marine Mammals (Document Reference 5.1.11), Table 11.12, Chapter 9 Benthic Ecology (Document Reference 5.1.9) and Chapter 10 Fish and Shellfish (Document Reference 5.1.10).</p>
MOR_028_008_020 623	<p>Disturbance distances from the Morecambe Generation Project have been applied to other projects, however it has not been demonstrated why the assessment results are applicable to other projects or that they are the worst-case. We do not agree with this approach and advise that, where available, the Applicant presents the other project's project-specific disturbance ranges. The assessment of impacts on harbour seal does not consider the nearest Management Unit (North West England). The submitted ES should present the assessment against the North West MU, as the worst-case.</p>	<p>Wherever possible, project-specific data has been applied for impact ranges to the assessment. If such data has been omitted, the Applicant applied known disturbance ranges based on data from the Project or from available scientific literature using the worst case.</p> <p>The seal assessments have been based on a dual approach to present the assessment based on a North-West (NW) England MU and well as an assessment considering the combined MUs for the wider Reference population (Chapter 11 Marine Mammals, Section 11.6 (Document Reference 5.1.11)).</p>
MOR_028_009_020 623	<p>Natural England has not yet had sight of the draft MMMP and therefore we cannot agree at this stage that the measures in the MMMP will be sufficient to avoid residual significant effect in EIA terms. We advise that noise abatement systems should be included as an option in the draft MMMP Up to 13% of the CIS MU population of harbour porpoise may be disturbed at any one time from all projects in-combination. NE is concerned that whilst there is no spatial overlap between the Project and the Bristol Channel Approaches SAC, this level of in-combination disturbance could impact the ability of harbour porpoise to remain a</p>	<p>The Draft MMMP (Document Reference 6.5) has been provided with the DCO application in which mitigation measures have been considered. The mitigation requirements have been discussed and will be finalised through consultation post-consent when the Project design has been confirmed, including consideration of noise abatement systems if required.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	viable component of the site (Conservation Objective 1). We welcome further engagement on this issue to ensure that no AEol to harbour porpoise SACs occurs	Bristol Channel Approaches SAC has been considered in the RIAA (Document Reference 4.9), which includes assessment of potential in-combination disturbance impacts on harbour porpoise.
MOR_028_010_020 623	Generally, Natural England consider that data used for historic projects should be updated to reflect contemporary input parameters and methods wherever practicable. For the avoidance of doubt, Natural England advise that all relevant project-alone impacts are considered when calculating cumulative and in-combination totals. I.e., impacts deemed to be negligible alone should not be scoped out. This is to counter the risk that many such impacts could become significant when considered as a whole.	The approach undertaken in the Environmental Statement (ES) was considered appropriate to assess cumulative impacts on seabirds. The cumulative assessment has been updated taking into account historic projects; refer to Sections 12.4.4 and 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).
MOR_028_011_020 623	The cumulative and in-combination assessments do not factor in impacts from a number of other projects due to a lack of data. Unknown impacts have been treated as zero which will inevitably underestimate impacts, potentially significantly. We propose collaborative working with the project through the EWG to generate suitable impact estimates for historic projects. Natural England advises that 24 months of survey effort is the minimum expected evidence standard for ornithological impact assessment. Natural England cannot therefore make any conclusive judgements based on this PEIR and accordingly, our advice focuses on the methodology.	<p>The approach undertaken in the ES was considered appropriate to assess cumulative impacts on seabirds. The cumulative assessment has been updated taking into account historic projects; refer to Sections 12.4.4 and 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12) and has been presented to Natural England through the Evidence Plan Process on the 28 March 2024.</p> <p>The ES includes the full 24 months of digital aerial survey data. Project-alone and cumulative impact assessments have been updated accordingly since PEIR in Sections 12.6 and 12.7 in Chapter 12 Offshore Ornithology and presented to Natural England through the Evidence Plan Process.</p>
MOR_028_012_020 623	Construction and maintenance vessel routes are not currently considered, and in the case of operational impacts, vessel movement is not discussed as a source of impact. Natural England advises that the impact of potential vessel routes must be fully considered in the ES. Depending on the routes used, seasonal restrictions may be needed.	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection and heliport selection will be made post consent.</p> <p>It was assumed vessel movements would cross Liverpool Bay SPA. Embedded mitigation includes restricting vessel movements where possible to existing navigation routes, and best practice vessel management; refer to Section 12.3.3 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_028_013_020 623	Natural England consider calculating a (reduced) 'effective displacement area' of effect risks underestimating the % of the SPA that is subject to displacement effects. Natural England consider that it is appropriate to take into account the original SPA boundary when calculating the area of red-throated diver supporting habitat within the SPA that would be affected by the project, NE advise that the area of effect within the SPA based on the overall area subject to displacement effects should be calculated. Displacement values that both include and exclude those parts of the SPA that fall beyond the original boundary should be presented. Natural England further advise that the area of the SPA subject to displacement for red-throated diver is considered in-combination with other plans and projects.	<p>Chapter 12 Offshore Ornithology (Document Reference 5.1.12) presents assessments displacement values that both include and exclude those parts of the SPA that fall beyond the original boundary should be presented.</p> <p>Specific displacement assessment for red-throated diver was presented to Natural England through the Evidence Plan Process and is also presented in the chapter.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_014_020 623	<p>The in-combination assessment suggests a 60% increase in baseline mortality for non-breeding lesser black-backed gull at Morecambe Bay and Duddon Estuary SPA yet concludes that an adverse effect is unlikely. We accept that this estimate is likely to be precautionary, but there is an obvious need for thorough investigation into this impact, including through PVA. We therefore advise that PVA modelling is undertaken to investigate increases in baseline mortality of >1%. Tracking studies are used to evidence that the apportioning undertaken is not appropriate for the consideration of impacts. Natural England advise that this suggests an alternative approach to apportioning should be investigated utilising tracking data and other relevant evidence to generate defensible apportioning of lesser-black backed gull impacts to SPAs. Natural England advise that the alone and in-combination assessments should be revisited to account for the complete baseline survey data and any updates to cumulative and in-combination totals. Natural England reiterate our advice to follow the mitigation hierarchy and reduce the potential impacts of the project by increasing the minimum rotor clearance above LAT</p>	<p>Project-alone and in-combination assessments in the RIAA have been updated with the full 24 months of baseline survey data. In respect of lesser black-backed gull, it was concluded that there would be no meaningful mortality contribution from the Project. However, in-combination estimates (including PVA) have been presented as context to the assessment, but without prejudice to the conclusion of no adverse effect on integrity.</p> <p>It was noted that the Natural England response referred to rotor clearance above LAT, but the Design Envelope provided in the PEIR assessment was 22m minimum above Highest Astronomical Tide (HAT). This was equivalent to approximately ~32m above LAT. Following stakeholder consultation, the rotor clearance above sea level (air gap) has been increased to 25m above HAT (i.e. ~35m above LAT). This air gap has been used as the basis for collision risk estimates in the ES; refer to Sections 12.3.2 - 12.3.3 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_028_015_020 623	<p>NE's preferred approach would be to use modelling that is specific to the project being assessed. Whilst justification for use of the conceptual approach is presented, we do not consider this to be an acceptable standard approach. The risk to Marine Protected Areas (MPAs) of using this approach is somewhat reduced due to the distance to MPAs with benthic features. However, impacts to the conservation objectives for mobile interest features of designated sites cannot currently be excluded. This is reflected in the Red Amber Green (RAG) rating.</p> <p>Recommendation:</p> <p>We recommend that the lower level of confidence implicit in using a nearby project as a proxy is noted so that it may be reflected in future in-combination assessments.</p> <p>We further recommend that monitoring for effects on physical processes should be developed and implemented in discussion with the ETG and that project specific evidence gathering and modelling work should be considered to inform the ES, in order to manage the risk inherent in the conceptual approach.</p>	<p>The conceptual assessment approach applied in the Environmental Statement (ES) assessment has been updated since PEIR to include numerical modelling results from Mona and Morgan, in addition to AyM numerical modelling.</p> <p>Given the available data, including modelling from Mona and Morgan which use a calibrated model that covers the windfarm site, it is considered that the conceptual modelling approach adequately informs the ES assessment. Further justification of this approach was provided in a technical note outlining a more comprehensive conceptual approach to the assessment of physical processes which was issued to the Marine Ecology ETG in August 2023.</p> <p>Natural England responded that the updated proposed conceptual approach provides 'a more appropriate evidence base than Awel-y-Mor alone', and 'presents an improvement to the previous conceptual approach and will result in a better supported ES'.</p> <p>A justification for the conceptual approach is provided in Section 7.4.3.3 in Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7).</p> <p>Monitoring for effects on the seabed is outlined in the In Principle Monitoring Plan (Document Reference 6.4).</p>
MOR_028_016_020 623	<p>NE notes that the full effect of pre-installation works on benthic habitats in the array area, or at distance is not thoroughly assessed. In particular, the impact of UXO clearance is stated to be negligible in the Benthic Ecology chapter, but this is not supported by an assessment of this activities effects in the Marine Geology, Oceanography and Physical Processes or Marine Sediment and Water Quality chapter. NE advises that such conclusions should not be drawn until the scope of</p>	<p>Unexploded Ordnance (UXO) clearance for the Project and for other projects in the region can cause increased Suspended sediment concentrations (SSCs) and indentations on the seabed. However, these effects would be local, temporary and recoverable and, as such, effects are negligible and not considered to cause cumulative effects. UXO clearance activities for the Project would be considered as part of a separate licence application prior to any works. A more detailed assessment would be undertaken as part of this separate licence when the scale of UXO clearance</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>this work is better understood. Furthermore, it is still important to understand the magnitude of negligible or residual effects as these will need to be scoped in to cumulative and in-combination assessments.</p> <p>Recommendation: The full scope of pre installation seabed preparation work should be considered in the Marine Geology, Oceanography and Physical Processes; Marine Sediment and Water Quality chapters of the ES. These effects should then be included in the Benthic Ecology assessment and as potential impacts on supporting habitat receptors for adjacent designated sites.</p>	<p>required is better understood through detailed surveys and upon refinement of the layout.</p> <p>It would however be expected that in the case of UXO (high order) detonation, craters in the seabed would be formed. While the size of craters would be specific to the UXO and sediment type, it would be expected that craters would be backfilled via tidal currents which would begin following the UXO detonation.</p> <p>Further information on the likely scope of UXO clearance is included in Section 5.6.2.2 in Chapter 5 Project Description (Document Reference 5.1.5).</p>
MOR_028_017_020 623	<p>The 10% figure of cable affected by sand waves is not presented in the context of any supporting evidence.</p> <p>Recommendation: Whilst this looks appropriate for this site, the figure should be confirmed in Reference to available evidence to demonstrate that it is realistic, e.g. the % of the site overall that is affected by sand waves. Other offshore windfarm projects have provided a burial risk assessment to demonstrate this.</p>	<p>As shown in Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7) there are no sandwaves across the Project windfarm site (following changes to the red line boundary between PEIR and ES). A value of 10% sandwave clearance is considered a precautionary amount for inter-array and platform link cables. This is supported by results from an initial Burial Assessment Study (BAS), which would be further detailed and provided within the Cable Specification and Installation Plan (CSIP).</p>
MOR_028_018_020 623	<p>NE's preferred approach would be to use modelling that is specific to the project being assessed. Whilst justification for use of the conceptual approach is presented, we do not consider this to be an acceptable standard approach. The risk to MPAs of using this approach is somewhat reduced due to the distance to MPAs with benthic features. However, impacts to the conservation objectives for mobile interest features of designated sites cannot currently be excluded. This is reflected in the RAG rating.</p> <p>Recommendation: Ensure the lower level of confidence implicit in using a nearby project as a proxy is noted so that it may be reflected in future in-combination assessments. Monitoring for effects on physical processes should be developed and implemented in discussion with the ETG. Project specific evidence gathering and modelling work should be considered to inform the ES, in order to manage the risk inherent in the conceptual approach.</p>	<p>The conceptual assessment approach applied in the ES assessment has been updated since PEIR to include numerical modelling results from Mona and Morgan, in addition to AyM numerical modelling.</p> <p>Given the available data, including modelling from Mona and Morgan which use a calibrated model that covers the windfarm site, it is considered that the conceptual modelling approach adequately informs the ES assessment. Further justification of this approach was provided in a technical note outlining a more comprehensive conceptual approach to the assessment of physical processes which was issued to the Marine Ecology ETG in August 2023.</p> <p>Natural England responded that the updated proposed conceptual approach provides 'a more appropriate evidence base than Awel-y-Mor alone', and 'presents an improvement to the previous conceptual approach and will result in a better supported ES'.</p> <p>A justification for the conceptual approach is provided in Section 7.4.3.3 in Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7). Monitoring for effects on the seabed is outlined in the In Principle Monitoring Plan (Document Reference 6.4).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_019_020 623	<p>NE notes that the full effect of pre-installation works on benthic habitats in the array area, or at distance is not thoroughly assessed. In particular, the impact of UXO clearance is stated to be negligible in the Benthic Ecology chapter, but this is not supported by an assessment of this activities effects in the Marine Geology, Oceanography and Physical Processes or Marine Sediment and Water Quality chapter. NE advises that such conclusions should not be drawn until the scope of this work is better understood. Furthermore, it is still important to understand the magnitude of negligible or residual effects as these will need to be scoped in to cumulative and in-combination assessments.</p> <p>Recommendation: The full scope of pre installation seabed preparation work should be considered in the Marine Geology, Oceanography and Physical Processes; Marine Sediment and Water Quality chapters of the ES. These effects should then be included in the Benthic Ecology assessment and as potential impacts on supporting habitat receptors for adjacent designated sites.</p>	<p>Unexploded Ordnance (UXO) clearance for the Project and for other projects in the region can cause increased Suspended sediment concentrations (SSCs) and indentations on the seabed. However, these effects would be local, temporary and recoverable and, as such, effects are negligible and not considered to cause cumulative effects. UXO clearance activities for the Project would be considered as part of a separate licence application prior to any works. A more detailed assessment would be undertaken as part of this separate licence when the scale of UXO clearance required is better understood through detailed surveys and upon refinement of the layout.</p> <p>It would however be expected that in the case of UXO (high order) detonation, craters in the seabed would be formed. While the size of craters would be specific to the UXO and sediment type, it would be expected that craters would be backfilled via tidal currents which would begin following the UXO detonation.</p> <p>Further information on the likely scope of UXO clearance is included in Section 5.6.2.2 in Chapter 5 Project Description (Document Reference 5.1.5).</p>
MOR_028_020_020 623	<p>NE's preferred approach would be to use modelling that is specific to the project being assessed. Whilst justification for use of the conceptual approach is presented, we do not consider this to be an acceptable standard approach. The risk to MPAs of using this approach is somewhat reduced due to the distance to MPAs with benthic features. However, impacts to the conservation objectives for mobile interest features of designated sites cannot currently be excluded. This is reflected in the RAG rating.</p> <p>Recommendation: Ensure the lower level of confidence implicit in using a nearby project as a proxy is noted so that it may be reflected in future in-combination assessments. Monitoring for effects on physical processes should be developed and implemented in discussion with the ETG. Project specific evidence gathering and modelling work should be considered to inform the ES, in order to manage the risk inherent in the conceptual approach.</p>	<p>The conceptual assessment approach applied in the ES assessment has been updated since PEIR to include numerical modelling results from Mona and Morgan, in addition to AyM numerical modelling.</p> <p>Given the available data, including modelling from Mona and Morgan which use a calibrated model that covers the windfarm site, it is considered that the conceptual modelling approach adequately informs the ES assessment. Further justification of this approach was provided in a technical note outlining a more comprehensive conceptual approach to the assessment of physical processes which was issued to the Marine Ecology ETG in August 2023.</p> <p>Natural England responded that the updated proposed conceptual approach provides 'a more appropriate evidence base than Awel-y-Mor alone', and 'presents an improvement to the previous conceptual approach and will result in a better supported ES'.</p> <p>A justification for the conceptual approach is provided in Section 7.4.3.3 Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7)</p> <p>Monitoring for effects on the seabed is outlined in the In Principle Monitoring Plan (Document Reference 6.4).</p>
MOR_028_021_020 623	<p>NE notes that the full effect of preinstallation works on benthic habitats in the array area, or at distance is not thoroughly assessed. In particular, the impact of UXO clearance is stated to be negligible in the Benthic Ecology chapter, but this is not supported by an assessment of this activity's effects in the Marine Geology, Oceanography and Physical Processes or Marine Sediment and Water Quality chapter. NE</p>	<p>Pre-installation works are described in Section 5.6.2. These are assessed in Chapter 7 Marine Geology, Oceanography and Physical Processes (Document Reference 5.1.7), Chapter 8 Marine Sediment and Water Quality (Document Reference 5.1.8) and Chapter 9 Benthic Ecology. Further justification is provided in Chapter 7 Marine Geology, Oceanography and Physical Processes, Chapter 8 Marine Sediment and</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>advises that such conclusions should not be drawn until the scope of this work is better understood. Furthermore, it is still important to understand the magnitude of negligible or residual effects as these will need to be scoped in to cumulative and in combination assessments.</p> <p>Recommendation: The full scope of pre installation seabed preparation work should be considered in the Marine Geology, Oceanography and Physical Processes; Marine Sediment and Water Quality chapters of the ES. These effects should then be included in the Benthic Ecology assessment and as potential impacts on supporting habitat receptors for adjacent designated sites.</p>	<p>Water Quality and Chapter 9 Benthic Ecology. It is noted that UXO clearance, if required, would be subject to a separate licence and more detailed assessment.</p>
MOR_028_022_020 623	<p>We welcome the recognition that NE Advice on Ops may not necessarily include the most up to date evidence, and the inclusion of potential effects of underwater noise and vibration on benthic communities.</p> <p>Recommendation: Natural England supports this approach where more recent evidence may suggest potential impacts that are not currently recorded in NE's Advice on Ops.</p>	<p>The latest publicly-available evidence has been used to inform the assessments set out in Section 9.6.3.3, Section 9.6.4.7 and Section 9.6.5.4 in Chapter 9 Benthic Ecology (Document Reference 5.1.9).</p>
MOR_028_023_020 623	<p>We are content that the potential for spread of INNS due to introduction of new infrastructure is recognised. However, there is no evidence presented to confirm that the increase of additional infrastructure does not increase the risk further.</p> <p>Recommendation: We would welcome the adoption of mitigation measures to limit the spread of INNS and post-construction monitoring of INNS on the introduced hard infrastructure.</p>	<p>Mitigation set out in Section 9.6.4.8 in Chapter 9 Benthic Ecology (Document Reference 5.1.9), includes the potential for INNS monitoring, which would be taken into consideration when developing post-construction inspection surveys of hard substrate.</p>
MOR_028_024_020 623	<p>NE notes that the full effect of preinstallation works on benthic habitats in the array area, or at distance is not thoroughly assessed. In particular, the impact of UXO clearance is stated to be negligible in the Benthic Ecology chapter, but this is not supported by an assessment of this activity's effects in the Marine Geology, Oceanography and Physical Processes or Marine Sediment and Water Quality chapter. NE advises that such conclusions should not be drawn until the scope of this work is better understood. Furthermore, it is still important to understand the magnitude of negligible or residual effects as these will need to be scoped in to cumulative and in combination assessments.</p> <p>Recommendation:</p>	<p>Pre-installation works are described in Section 5.6.2. These are assessed in Chapter 7 Marine Geology, Oceanography and Physical Processes (Document Reference 5.1.7), Chapter 8 Marine Sediment and Water Quality (Document Reference 5.1.8) and Chapter 9 Benthic Ecology. Further justification is provided in Chapter 7 Marine Geology, Oceanography and Physical Processes, Chapter 8 Marine Sediment and Water Quality and Chapter 9 Benthic Ecology. It is noted that UXO clearance, if required, would be subject to a separate licence and more detailed assessment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>The full scope of pre installation seabed preparation work should be considered in the Marine Geology, Oceanography and Physical Processes; Marine Sediment and Water Quality chapters of the ES. These effects should then be included in the Benthic Ecology assessment and as potential impacts on supporting habitat receptors for adjacent designated sites.</p>	
MOR_028_025_020 623	<p>Number, and spacing of survey stations was adequate, as indicated by the existing evidence, which suggested a fairly homogenous sedimentary environment. However, the distribution of bedforms (as identified in the geophysical survey) and boulders, did not appear to be factored into the selection of survey stations. For example, the video transects were very limited in number, and appeared to be concentrated on the east of the study area. Transects across megaripples, or grab stations positioned on crests and troughs would have given a better indication of possible local variation in the benthic communities present.</p> <p>Recommendation: Natural England advises that when the ground truthing surveys are considered alongside the geophysical surveys there is likely to be sufficient confidence to characterise the seabed and the associated communities. However, preconstruction survey design will need to be modified to provide an adequate baseline, particularly where the study area overlaps with designated sites. We advise that any sampling strategy should include representation of potential local variation caused by morphological features such as megaripples, or other bedforms. This will need to be captured in the In Principle Monitoring Plan at the time of submission.</p>	<p>It is noted that there is no Project overlap with designated sites and that following the reduction of the windfarm site boundary since PEIR, no identified sandwaves are present within the windfarm site and the prevalence of megaripples has reduced. The video transects are all contained within the windfarm site, noting that the western area of survey area (PEIR boundary) is no longer part of the windfarm site. Given the ground conditions within the windfarm site, it is not considered that any further ground truthing surveys are required. However, further geophysical surveys would be undertaken pre-construction (as outlined in the In Principle Monitoring Plan (Document Reference 6.4).</p>
MOR_028_026_020 623	<p>The relevant range of impacts and receptors have been identified. We welcome the recognition that the OSPAR habitat “seapens and burrowing megafauna” can be present in the absence of seapens, and we are content with the approach taken to assess impacts against this habitat in particular. We are content with the approach taken to assessing sensitivity to the different impacts.</p>	<p>The Applicant notes your response.</p>
MOR_028_027_020 623	<p>Relevant designated features have been screened in and out as appropriate.</p>	<p>The Applicant notes your response.</p>
MOR_028_028_020 623	<p>Agree with the sites and features screened in and out.</p>	<p>The Applicant notes your response.</p>
MOR_028_029_020 623	<p>We welcome the recognition that NE Advice on Ops may not necessarily include the most up to date evidence, and the inclusion of</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>potential effects of underwater noise and vibration on benthic communities.</p> <p>Recommendation: Natural England supports this approach where more recent evidence may suggest potential impacts that are not currently recorded in NE's Advice on Ops.</p>	
MOR_028_030_020 623	<p>We are content that the potential for spread of INNS due to introduction of new infrastructure is recognised. However, there is no evidence presented to confirm that the increase of additional infrastructure does not increase the risk further.</p> <p>Recommendation: We would welcome the adoption of mitigation measures to limit the spread of INNS and post-construction monitoring of INNS on the introduced hard infrastructure.</p>	<p>Measures to control risk of INNS introduction have been included in embedded mitigation and monitoring is also included as part of the In Principal Monitoring Plan (Document Reference 6.4).</p>
MOR_028_031_020 623	<p>From a benthic ecology point of view, NE agrees with the conclusions as set out thus far. But further considerations are required to ensure all impact pathways have been fully considered once the full scope of the project is better defined.</p>	<p>The Applicant notes your response. Cumulative assessments have been considered and presented in Chapter 9 Benthic Ecology (Document Reference 5.1.9) and considered in Chapter 23 Summary Generation and Transmission Assets Assessment (Document Reference 5.1.23).</p>
MOR_028_032_020 623	<p>Both shad species (<i>Alosa alosa</i> and <i>Alosa fallax</i>) are omitted from the diadromous fish receptor group, despite being present in the region (non-spawning).</p> <p>Recommendation: Include shad within all assessments of impacts on diadromous fish, particularly underwater noise, or provide a justification for excluding them. The species is regionally present. https://sac.jncc.gov.uk/species/S1103/</p>	<p>Whilst shad are present in the region, there is no SAC designated for shad within 100km of the Project, thereby ruling out direct effects on these sites. All worst-case noise impact ranges for fish species are contained within 50km, so there is no pathway for direct impact on SACs designated for shad species. Whilst adult non-spawning shad may be present at the site, there is no way to apportion individuals to any one SAC river population (or non-designated population). However, shad species are now considered in Chapter 10 Fish and Shellfish of the ES and the Report to Inform Appropriate Assessment (RIAA (Document Reference 4.9)) as part of the diadromous fish assemblage (Section 10.5.8) in Chapter 10 Fish and Shellfish (Document Reference 5.1.10).</p>
MOR_028_033_020 623	<p>Several designated sites from the region are not included in the assessment. However, all the omitted fish designated features have coincidentally been assessed due to their presence within other designated sites which were assessed.</p> <p>Recommendation: Incorporate the following designated site features into the appropriate assessments: Solway Firth MCZ (Smelt) Solway Firth SAC (Sea lamprey, River lamprey). River Ehen SAC (Atlantic Salmon)</p>	<p>The River Ehen (Atlantic Salmon) and River Derwent and Bassenthwaite Lake SAC (Atlantic Salmon, Sea lamprey, River lamprey) are included, and listed in Section 10.5.10 in Chapter 10 Fish and Shellfish (Document Reference 5.1.10). Designated sites beyond 100km are not listed, but an assessment of the species listed as part of the Solway Firth MCZ (Smelt), Solway Firth SAC (Sea lamprey, River lamprey) are considered in the fish assemblages within this Chapter and at designated sites in closer proximity to the Project.</p> <p>All sites are also discussed within the Marine Conservation Zone Assessments (MCZA) (Document Reference 4.13) and Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) provided as part of the DCO Application.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	River Derwent and Bassenthwaite Lake SAC (Atlantic Salmon, Sea lamprey, River lamprey).	
MOR_028_034_020 623	Project parameters are clear.	The Applicant notes your response.
MOR_028_035_020 623	The WCS is largely suitable.	The Applicant notes your response.
MOR_028_036_020 623	<p>It is unclear why UXO removal is not considered within Table 10.2. It could legitimately be included under existing pressure “Impact 4b: underwater noise and vibration impacts to hearing sensitive species due to other activities”.</p> <p>Recommendation: Clarify here how the UXO removal is addressed within the PEIR and include within the WCS either as Impact 4b or as a new Impact 4c. Wider sections of the PEIR suggest that the pressure “UXO removal” is part of a separate project and so considered cumulatively, but we recommend including it in the underwater noise assessment for completeness.</p>	As discussed through the EPP, underwater noise modelling results for UXO impact ranges are included for information only. Once quantities and likely charge weights of potential UXO are known, a more detailed assessment of UXO clearance would be undertaken, which would accompany a separate Marine Licence application post-consent.
MOR_028_037_020 623	<p>Both shad species (<i>Alosa alosa</i> and <i>Alosa fallax</i>) are omitted from the diadromous fish receptor group, despite being present in the region (non-spawning presence in riparian & marine habitats).</p> <p>Recommendation: Include shad within all assessments of impacts on diadromous fish, particularly underwater noise, or provide a justification for excluding them. The species is regionally present. https://sac.jncc.gov.uk/species/S1103/</p>	Whilst shad are present in the region, there is no SAC designated for shad within 100km of the Project, thereby ruling out direct effects on these sites. All worst-case noise impact ranges for fish species are contained within 50km, so there is no pathway for direct impact on SACs designated for shad species. Whilst adult non-spawning shad may be present at the site, there is no way to apportion individuals to any one SAC river population (or non-designated population). However, shad species are now considered in Section 10.5.8 Chapter 10 Fish and Shellfish (Document Reference 5.1.10) and the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) as part of the diadromous fish assemblage.
MOR_028_038_020 623	<p>Suitable data sources were used. Text suggests that stakeholders have agreed that a robust assessment was possible with the available data, and therefore no specific fish sampling surveys were required. The limitations of the survey data were largely acknowledged.</p> <p>However, NE note that there is only a single Reference which may contain data that is both reasonably recent and is also site specific (the Awel y Mor Offshore Windfarm ES), but it is unclear whether any new data was collected under this project.</p> <p>Recommendation:</p>	<p>It is noted that NE is broadly content with the data sources used.</p> <p>Site specific benthic survey data was collected for the Project by Ocean Ecology Limited (OEL) in May/June 2022. The PSA data generated has been used to inform the baseline habitat suitability for sandeel and spawning herring (Section 10.5.4) in Chapter 10 Fish and Shellfish (Document Reference 5.1.10).</p> <p>The caveat “Data sources such as Ellis et al., (2012) are over 10 years old and so may not reflect true species composition and abundance” suggested by NE has been stated where Coull et al., (1998) and Ellis et al., (2012) are used and considered within assessments.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>NE recognise that the data sources used broadly represent the best available evidence for key fish habitats on a national scale. Most data listed in Table 10.5 are over 10 years old and are necessarily coarse in scale. These factors introduce uncertainty when applied to site-specific assessments, which is largely recognised in the text. Nevertheless the submitted ES would benefit from presenting relevant caveats such as “Data sources such as Ellis et al (2012) are over 10 years old and so may not reflect true species composition and abundance”.</p> <p>Due to this uncertainty NE broadly recommend that individual OWF projects generate site-specific data on fish community composition to verify the conclusions within environmental assessments. However, fish populations are highly mobile and complex. Data gathered by individual projects are therefore likely to have limited use apart from confirming the conclusions presented within the ES. Therefore, we highlight that this undertaking would be greatly beneficial to the ES, but is not a pre-requisite for a successful assessment.</p> <p>Additional, dedicated surveys for protected species (such as diadromous fish) are appropriate where potential risks to local populations are identified. Depending on the risk to protected fish and migratory corridors, this additional data may be crucial to a successful impact assessment.</p>	<p>No significant impacts have been identified for fish populations or diadromous fish species, and there is no proposal to undertake pre or post construction monitoring. These assessments have been based on recent datasets, such as heatmaps produced from the AFBI NINEL herring larvae survey (Chapter 10 Fish and Shellfish (Document Reference 5.1.10), recent landings data (Section 10.5.2), site-specific benthic survey data for sediment type (Section 10.5.4) and Project specific (and precautionary) underwater noise modelling (Appendix 11.1 Underwater Noise Assessment (Document Reference 5.2.11.1)). This has allowed both broadscale and local effects to be considered.</p>
MOR_028_039_020 623	<p>This section contains a Reference to fish being a “fleeing” receptor, also present throughout Document relating to underwater noise modelling. Natural England advise that there is very little evidence to support any assertion that fish flee consistently and coherently away from noise sources. Agree with MMO comment (ref 3.4.1) dated 13th July 2022 – 2nd August 2022.</p> <p>Recommendation: Ensure consistency across the text that fish are considered a stationary receptor within the underwater noise assessment.</p>	<p>On a precautionary basis, all fish have been treated as stationary receptors for the underwater noise impact assessment, including for sequential piling (Section 10.6.2.4) Chapter 10 Fish and Shellfish (Document Reference 5.1.10).</p>
MOR_028_040_020 623	<p>In some cases, we noticed significant overlap with spawning grounds for a number of commercial species, including Cod, Plaice, Sole, Herring, sprat and sandeel.</p> <p>Recommendation: We highlight that whilst these species are not designated features within SAC or MCZ, some are NERC Section 41 species, and/or are of commercial importance and/or provide foraging resources for other receptors.</p>	<p>To clarify, there is no direct overlap of the Project, or its worst-case noise impact range, with herring spawning grounds, as defined by Coull et al., (1998) or Ellis et al., (2012). Heatmapping for herring spawning habitat suitability, using the previous 10 years of NIHLS data, supports this position (Chapter 10 Fish and Shellfish (Document Reference 5.1.10)</p> <p>In the case of sandeel, Ellis et al., (2012) suggests that the Project overlaps with high intensity sandeel spawning ground. However, recent site-specific PSA data collected for the Project, together with BGS data, shows that the Project is located in an area</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>The submitted ES should recognise that the datasets used are relatively old and have a coarse spatial scale. Updated data may provide more accurate information.</p>	<p>that is unsuitable (overly high mud content) sandeel habitat (Chapter 10 Fish and Shellfish (Document Reference 5.1.10)).</p> <p>In this case, the recent site-specific data takes precedence.</p> <p>For other species, such as cod, plaice, sole and sprat, it is acknowledged that the Project overlaps with spawning grounds, as defined by Coull et al., (1998) or Ellis et al., (2012). However, the Applicant maintains the position that the ZoI for serious and permanent effects is temporary and minor, in the context of the wider spawning grounds throughout the Irish and Celtic Seas, which the high intensity spawning maps tend to encompass. There is a range of 8.2km for potential mortal injury assuming a fish stationary receptor subjected to noise from three sequential monopiles with a swim bladder involved in hearing (Table 10.25).</p> <p>The conservation importance of the species mentioned by NE is set out in Table 10.14 and Table 10.15 Chapter 10 Fish and Shellfish.</p> <p>The caveat “Data sources such as Ellis et al (2012) are over 10 years old and so may not reflect true species composition and abundance” suggested by NE has been used where Coull et al., (1998) and Ellis et al., (2012) is used and considered within assessments. This includes Table 10.5 and Section 10.4.6.</p>
<p>MOR_028_041_020 623</p>	<p>Please note that NE does not support any particular noise threshold for behavioural disturbance of fish due to a lack of evidence supporting such a threshold. The evidence base underlying the 135dB stated in Table 10.25 is best available, but insufficient to draw reasonable conclusions around degree of fish response to underwater noise at this threshold, and also the degree of impact arising from any behavioural change. Further evidence is needed. Beyond noting this point and the project’s proximity to herring spawning grounds (Fig 10.5) in the vicinity, NE defers to CEFAS advice on impacts to herring spawning from underwater noise.</p> <p>Recommendation: Commentary only. NE defers to CEFAS regarding impacts on herring spawning.</p>	<p>Noted, further consultation was undertaken with the MMO and Cefas. The 135dB (as per Hawkins et al., 2014a) is used as a precautionary, but appropriate threshold for the purpose of modelling behavioural responses in herring at their spawning ground. The ES has been updated to include Heatmapping for herring spawning habitat suitability, using the previous 10 years of NIHLS data to support assessments</p>
<p>MOR_028_042_020 623</p>	<p>See above comment addressing Table 10.5/ sections 10.33 & 10.56.</p> <p>Recommendation: See above comment relating to table 10.5/ sections 10.33 & 10.56.</p>	<p>To clarify, there is no direct overlap of the Project, or its worst-case noise impact range, with herring spawning grounds, as defined by Coull et al., (1998) or Ellis et al., (2012). Heatmapping for herring spawning habitat suitability, using the previous 10 years of NIHLS data, supports this position (Figure 10.6).</p> <p>In the case of sandeel, Ellis et al., (2012) suggests that the Project overlaps with high intensity sandeel spawning ground. However, recent site-specific PSA data collected for the Project, together with BGS data, shows that the Project is located in an area that is unsuitable (overly high mud content) sandeel habitat (Chapter 10 Fish and Shellfish (Document Reference 5.1.10)).</p> <p>In this case, the recent site-specific data takes precedence.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>For other species, such as cod, plaice, sole and sprat, it is acknowledged that the Project overlaps with spawning grounds, as defined by Coull et al., (1998) or Ellis et al., (2012). However, the Applicant maintains the position that the ZoI for serious and permanent effects is temporary and minor, in the context of the wider spawning grounds throughout the Irish and Celtic Seas, which the high intensity spawning maps tend to encompass. There is a range of 8.2km for potential mortal injury assuming a fish stationary receptor subjected to noise from three sequential monopiles with a swim bladder involved in hearing (Table 10.25).</p> <p>The conservation importance of the species mentioned by NE is set out in Table 10.14 and Table 10.15 Chapter 10 Fish and Shellfish.</p> <p>The caveat "Data sources such as Ellis et al (2012) are over 10 years old and so may not reflect true species composition and abundance" suggested by NE has been used where Coull et al., (1998) and Ellis et al., (2012) is used and considered within assessments. This includes Table 10.5 and Section 10.4.6.</p>
MOR_028_043_020 623	<p>See comment C6 above addressing both section 10.189 & section 10.346</p> <p>Recommendation: See comment C6 above addressing both section 10.189 & section 10.346</p>	<p>On a precautionary basis, all fish have been treated as stationary receptors for the underwater noise impact assessment, including for sequential piling (Section 10.6.2.4) and for the cumulative noise assessment (Section 10.7.3), the sections Referenced by NE that referred to fleeing receptors have been amended.</p>
MOR_028_044_020 623	<p>See comment C5 on Baseline characterisation above.</p>	<p>It is noted that NE is broadly content with the data sources used.</p> <p>Site specific benthic survey data was collected for the Project by Ocean Ecology Limited (OEL) in May/June 2022. The PSA data generated has been used to inform the baseline habitat suitability for sandeel and spawning herring (Section 10.5.4 in Chapter 10 Fish and Shellfish (Document Reference 5.1.10)</p>
MOR_028_045_020 623	<p>Several designated sites from the region are not included in the assessment. However, all the omitted fish designated features have coincidentally been assessed due to their presence within other designated sites which were assessed.</p> <p>Recommendations: Incorporate the following designated site features into the appropriate assessments: Solway Firth MCZ (smelt) Solway Firth SAC (Sea lamprey, Reiver lamprey). River Ehen SAC (Atlantic Salmon) River Derwent and Bassenthwaite Lake SAC (Atlantic Salmon, Sea lamprey, river lamprey).</p>	<p>The River Ehen (Atlantic Salmon) and River Derwent and Bassenthwaite Lake SAC (Atlantic Salmon, Sea lamprey, River lamprey) are included, and listed in Section 10.5.10 in Chapter 10 Fish and Shellfish (Document Reference 5.1.10). Designated sites beyond 100km are not listed, but an assessment of the species listed as part of the Solway Firth MCZ (Smelt), Solway Firth SAC (Sea lamprey, River lamprey) are considered in the fish assemblages within this Chapter and at designated sites in closer proximity to the Project.</p> <p>All sites are also discussed within the MCZA and RIAA provided as part of the DCO Application.</p>
MOR_028_046_020 623	<p>Please note that NE defer to CEFAS on the suitability of the underwater noise modelling parameters and methods.</p> <p>Recommendation:</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	To note.	
MOR_028_047_020 623	<p>Both species of shad screened out despite presence in the region.</p> <p>Recommendation: Include shad within all assessments of impacts on diadromous fish, particularly underwater noise, or provide a justification for excluding them. The species is regionally present. https://sac.jncc.gov.uk/species/S1103/</p>	<p>Whilst shad are present in the region, there is no SAC designated for shad within 100km of the Project, thereby ruling out direct effects on these sites. All worst-case noise impact ranges for fish species are contained within 50km, so there is no pathway for direct impact on SACs designated for shad species. Whilst adult non-spawning shad may be present at the site, there is no way to apportion individuals to any one SAC river population (or non-designated population). However, shad species are now considered in this ES and the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) as part of the diadromous fish assemblage (Section 10.5.8 Chapter 10 Fish and Shellfish (Document Reference 5.1.10)).</p>
MOR_028_048_020 623	<p>Both shad species omitted from assessment.</p> <p>Recommendation: Include shad within all assessments of impacts on diadromous fish, particularly underwater noise, or provide a justification for excluding them. The species is regionally present. https://sac.jncc.gov.uk/species/S1103/</p>	<p>Whilst shad are present in the region, there is no SAC designated for shad within 100km of the Project, thereby ruling out direct effects on these sites. All worst-case noise impact ranges for fish species are contained within 50km, so there is no pathway for direct impact on SACs designated for shad species. Whilst adult non-spawning shad may be present at the site, there is no way to apportion individuals to any one SAC river population (or non-designated population). However, shad species are now considered in this ES and the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) as part of the diadromous fish assemblage (Section 10.5.8 Chapter 10 Fish and Shellfish (Document Reference 5.1.10)).</p>
MOR_028_049_020 623	<p>Natural England notes that Appendix B to Appendix 11.1 refers to hammer energies of 6,600 kJ (for monopiles) which have been used for sensitivity testing. This hammer energy is notably higher than 5,000 kJ used in the assessment. We therefore seek clarity on what the WCS is. It is imperative that the WCS is assessed given NE will advise that the WCS is conditioned through the deemed Marine Licence.</p> <p>Recommendation: Clarify the worst-case scenario hammer energy. The piling WCS should be secured as a licence condition in the submitted dML.</p>	<p>Assessment for the ES has been updated for the confirmed worst-case hammer energy (6,600kJ) and has been presented in Chapter 11 Marine Mammals (Document Reference 5.1.11), Table 11.1.</p>
MOR_028_050_020 623	<p>Only 1 year of baseline characterisation has been presented at this PEIR stage. Therefore we cannot agree with any density estimates derived from the digital aerial surveys presented at this stage. We anticipate that the density and abundance estimates will be updated in the ES.</p> <p>Recommendation: Present 2 years of baseline characterisation data in the ES, as already proposed by the Applicant.</p>	<p>The two-year survey data has been analysed and has been presented in Section 3 of Appendix 11.2 (Document Reference 5.2.11.2).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_051_020 623	<p>The Applicant has applied the disturbance distances from the Project to other projects, however they have not demonstrated why their assessment results are applicable to other projects or that they are the worst-case. We do not agree that this project's impact ranges can be considered a "standard impact range for disturbance." Natural England advises that, where available, the Applicant presents the other projects' project-specific disturbance ranges.</p> <p>Recommendation: The submitted ES should present the disturbance ranges from other projects' project-specific assessments.</p>	<p>Wherever possible, project-specific data has been applied for impact ranges to the assessment. If such data has been omitted, the Applicant applied known disturbance ranges based on data from the Project or from available scientific literature using the worst-case.</p>
MOR_028_052_020 623	<p>The EIA Method Statement – Marine Mammals stated that assessments will be done in the context of the nearest MU as well as the wider Reference population i.e. as a worst-case it is assumed that all harbour seals are from the nearest MU, the North-West England MU. However, the PEIR does not present assessments against this smaller population, only against the wider Reference population of multiple MUs.</p> <p>Recommendation: Present the assessment against the nearest MU, the North West MU, as the worst-case in the submitted ES.</p>	<p>The seal assessments have been based on a dual approach to present the assessment based on a North-West (NW) England MU and well as an assessment considering the combined MUs for the wider Reference population (Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6).</p>
MOR_028_053_020 623	<p>Natural England has not yet had sight of the draft MMMP. Therefore we cannot agree at this stage that the measures in the MMMP will be sufficient to avoid residual significant effect in EIA terms.</p> <p>We advise that noise abatement systems should be included as an option in the draft MMMP.</p> <p>Recommendation: Provide the draft MMMP at the DCO application stage, as already stated by the Applicant. Include noise abatement systems in the draft MMMP.</p>	<p>The Draft MMMP (Document Reference 6.5) has been provided with the DCO Application in which mitigation measures have been considered. The mitigation requirements will be finalised through consultation post-consent when the Project design has been confirmed.</p>
MOR_028_054_020 623	<p>The Applicant has identified that up to 13% of the CIS MU population of harbour porpoise may be disturbed at any one time from all projects in-combination. Whilst we acknowledge no spatial overlap between the Project and the Bristol Channel Approaches SAC, our concern is whether this level of in-combination disturbance could impact the ability of harbour porpoise to remain a viable component of the site (Conservation Objective 1). We welcome further engagement on potential further assessment/mitigation to demonstrate/ensure that no adverse effect on site integrity could occur.</p>	<p>The nearest designated site to the Project for harbour porpoise is the North Anglesey Marine/Gogledd Môn Forol SAC (Section 9.4.1.1). The harbour porpoise population has been assessed based on the MU and was considered in relation to the conservation objectives for all the relevant SACs.</p> <p>However, since the worst-case activities (such as underwater noise from piling) are expected to be scheduled for the summer season, while the Bristol Channel Approaches SAC is designated for the winter season (when the harbour porpoise presence was higher) (see Section 9.4.1.5 in Report to Inform Appropriate</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Recommendation:</p> <p>Continue engagement on potential further assessment/mitigation of in-combination disturbance effects to demonstrate no AEol to harbour porpoise SACs.</p>	<p>Assessment (RIAA) (Document Reference 4.9) it is anticipated that the Project would have a lesser impact on the associated population.</p> <p>Population modelling has been undertaken to determine whether there was a risk at a population level through Project-alone (see Sections 9.4.2, 9.5.2, 9.6.2 and 9.7.2) and in-combination effects (see Sections 9.4.3, 9.5.30, 9.6.30 and 9.7.30) and if there could be any potential for AEol.</p>
MOR_028_055_020 623	<p>We note that the PEIR for the Transmission Assets of Morecambe OWF is being developed separately and we have not had sight of it yet. At this stage the interdependencies between these two projects are unknown.</p>	<p>An assessment of the Transmission Assets combined with the Project has been included in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.7.3.1.</p>
MOR_028_056_020 623	<p>In the assessment of disturbance to seal haul outs there is no Reference to the potential port options. This information should be presented once known.</p> <p>Recommendation:</p> <p>Present the potential for port options at the ETG and/or in the submitted application, once known.</p>	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection will be made post consent.</p>
MOR_028_057_020 623	<p>Natural England has not yet had sight of marine mammal mitigation Documents (MMMP and Vessel Traffic Management Plan/Best Practice in the PEMP), which are proposed to be submitted with the DCO Application. At this stage, we do not know the parameters of these mitigation Documents.</p> <p>Recommendation:</p> <p>Provide the draft MMMP and PEMP at the DCO application stage, as already stated by the Applicant.</p>	<p>The Draft MMMP (Document Reference 6.5) and the Outline PEMP has been provided (Document Reference 6.2) with the DCO Application.</p>
MOR_028_058_020 623	<p>Natural England understands that sequential or concurrent piling of monopiles is not being considered. Also, that concurrent pin piles are not being considered. The only option for multiple piling events in one day is sequential piling of up to 4 pin piles. This will need to be secured as a licence condition.</p> <p>Recommendation:</p> <p>The piling WCS should be secured as a licence condition in the submitted dML.</p>	<p>Due to updates to the Project Design Envelope (PDE) there was the potential for up to three monopiles and four pin-piles to be installed sequentially in 24 hours.</p> <p>Underwater noise modelling (Appendix 11.1 (Document Reference 5.2.11.1)) and impact assessments have updated accordingly (Chapter 11 Marine Mammals, (Document Reference 5.1.11) Section 11.6.3.1).</p> <p>The final piling parameters will be confirmed post-consent and secured through the consultation on the final MMMP process.</p>
MOR_028_059_020 623	<p>The maximum UXO NEQ size modelled is lower than as we advise in the NE Best Practice Guidance. However, as the UXO assessment is only illustrative at this stage, this is not a material concern and should</p>	<p>The likely UXO threats posed at the Project site were investigated by Alpha Associates in which the highest UXO, with an NEQ of 353.6kg, was determined. Subacoustech has used this size in the UWN modelling and represents the worst-case for the study site (Appendix 11.1 (Document Reference 5.2.11.1)). The UXO</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>be addressed when the UXO clearance application is submitted later (post-consent).</p> <p>Recommendation: To note.</p>	<p>assessment presented in Appendix 11.3 (Document Reference 5.2.11.3) was an indicative assessment based on current information. A marine licence application will take into account the latest information on potential size of UXO to be cleared (if any) once information on the composition of any confirmed UXO is available.</p>
MOR_028_060_020 623	<p>Natural England notes that Appendix B to Appendix 11.1 refers to hammer energies of 6,600 kJ (for monopiles) which have been used for sensitivity testing This hammer energy is notably higher than 5,000 kJ used in the assessment. We therefore seek clarity on what the WCS is. It is imperative that the WCS is assessed given NE will advise that the WCS is conditioned through the deemed Marine Licence.</p> <p>Recommendations: Clarify the worst case scenario hammer energy The piling WCS should be secured as a license condition in the submitted dML.</p>	<p>Considerations for post-consent monitoring have been presented in the In Principle Monitoring Plan (IPMP) (Document Reference 6.4).</p>
MOR_028_061_020 623	<p>The Applicant states that jetting will produce the highest noise of the cable laying activities (more so than rock placement and cable laying). However, jetting does not appear to have been included in the underwater noise modelling.</p> <p>Recommendation: Present the underwater noise levels and impact zones associated with jetting.</p>	<p>As per the Project description in Chapter 5 Project Description of the ES, “cable burial can be achieved using [...] trenching (including jetting and mechanical cutting)”, thus has not been modelled separately but has been covered under ‘trenching’.</p>
MOR_028_062_020 623	<p>Only 1 year of baseline characterisation has been presented at this PEIR stage. Therefore we cannot agree with any density estimates derived from the digital aerial surveys presented at this stage. We anticipate that the density and abundance estimates will be updated in the ES.</p> <p>Recommendation: Present 2 years of baseline characterisation data in the ES, as already proposed by the Applicant.</p>	<p>The Applicant notes your response. Two-year survey data have been analysed and presented in the ES and Section 3 of Appendix 11.2 (Document Reference 5.2.11.2).</p>
MOR_028_063_020 623	<p>It would be beneficial to understand the level of agreement during the QA process.</p> <p>Recommendation: Present the level of agreement during the QA process in the submitted ES.</p>	<p>The QA agreement method has been described in section ‘2.3 Object identification’ in Appendix 12.1 Offshore Ornithology Technical Report (Document Reference 5.2.12.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_064_020 623	<p>It would be beneficial to understand the environmental conditions during each survey. For example, sea state can affect the number of marine mammals observed.</p> <p>Recommendation: Present the environmental conditions during each survey in the submitted ES.</p>	<p>The environmental conditions, taken from the monthly HiDef survey reports have been included in Section 3.1 of Appendix 11.2 (Document Reference 5.2.11.2).</p>
MOR_028_065_020 623	<p>It would be beneficial to understand the proportion of Definite, Probable and Possible for each marine mammal species, with examples of each, for review.</p> <p>Recommendation: Present the proportions of Definite, Probable and Possible of each marine mammal species, with examples of each, for our review through the ETG and include in the ES.</p>	<p>Species identification was not automated, but other tools assisted in object identification, under the scrutiny of marine mammal experts.</p>
MOR_028_066_020 623	<p>The survey methodology that has been used by the Applicant is standard for offshore wind projects. There are widely-acknowledged limitations of this method for determining marine mammal density and abundance, but this is not a project-specific issue.</p> <p>We do not agree that there is good understanding of the spatio-temporal distribution of marine mammals in the project area, particularly for species other than harbour porpoise. This evidence gap could be considered for post-consent monitoring.</p> <p>Recommendation: To note.</p>	<p>Considerations for post-consent monitoring have been presented in the In Principle Monitoring Plan (IPMP) (Document Reference 6.4).</p>
MOR_028_067_020 623	<p>Natural England notes the Applicant's response to the various additional sources that we have recommended for inclusion. We maintain our recommendations and welcome further engagement on the final list of sources that will be used in the ES.</p> <p>Recommendation: To note.</p>	<p>Additional sources have been reviewed and included in the ES up to 6 months prior to the DCO submission as agreed during the round 5 ETGs (held in October 2023).</p>
MOR_028_068_020 623	<p>It is not clear where information on baseline noise levels have been provided.</p> <p>Recommendation: Provide information on baseline noise levels in the submitted ES.</p>	<p>Baseline noise levels did not contribute to the underwater noise assessment, which relied entirely on absolute noise thresholds as criteria. The best available baseline data near the region was from 2016 (Burbo Bank Extension), which may not have been valid for Morecambe.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_069_020 623	<p>The EIA Method Statement – Marine Mammals stated that assessments will be done in the context of the nearest MU as well as the wider Reference population i.e. as a worst-case it is assumed that all grey seals are from the nearest MU, the North-West England MU. However, the PEIR assessment is done against the combined North-West England and Isle of Man MUs as the worst case.</p> <p>Recommendation: Present the assessment against the nearest MU, the North West MU, as the worst-case in the submitted ES.</p>	<p>Given the location of the Project both these MUs were reflective of the grey seal populations that would mostly overlap the site, hence the NW England MU and the IoM MU have been considered to be the “nearest MU”.</p>
MOR_028_070_020 623	<p>The EIA Method Statement – Marine Mammals stated that the harbour seal Reference population would include the most recent estimate for the Isle of Man population. However, this population does not appear to have been included in the PEIR.</p> <p>Recommendation: Include the Isle of Man population in the harbour seal wider Reference population in the submitted ES.</p>	<p>Although harbour seals have been observed annually in small numbers (Howe, 2018), the report did not provide count numbers of these rare visitors in Manx waters.</p>
MOR_028_071_020 623	<p>The EIA Method Statement – Marine Mammals stated that assessments will be done in the context of the nearest MU as well as the wider Reference population i.e. as a worst-case it is assumed that all harbour seals are from the nearest MU, the North-West England MU. However, the PEIR does not present assessments against this smaller population, only against the wider Reference population of multiple MUs.</p> <p>Recommendations: Present the assessment against the nearest MU, the North West MU, as the worst-case in the submitted ES.</p>	<p>Data from Special Committee on Seals (SCOS (2022)) showed that NW England had a population of 7 harbour seals. The data was however outdated and only provided rough estimates (SCOS, 2022) due to a lack of surveying in this particular area.</p> <p>Tracking data provided by Carter et al. (2020; 2022) showed that seals from the Northern Ireland (NI) MU utilised Liverpool Bay and may be regarded as one population, hence the Reference population has also been assessed on the combined NW England MU and NI MU.</p>
MOR_028_072_020 623	<p>The Applicant has used Waggitt et al (2019) to determine absolute density of several cetacean species. However, Waggitt et al (2019) do not advise that their maps are used in this way: “Because of these caveats, outputs should not be used as a representation of absolute densities and fine-scale distributions at the present time. Instead, it is recommended that outputs be used as a general illustration of relative densities and broad-scale distribution over several decades”. The Applicant should present densities from other sources for comparison, e.g. the additional sources recommended by Natural England in the Scoping Opinion.</p> <p>Recommendation:</p>	<p>Densities for all species have been reviewed across the most recent and available sources including Project-specific surveys, Small Cetaceans in the European Atlantic and North Sea (SCANS-IV) (2023), Evans and Waggitt (2023) and Waggitt et al. (2019) (see Section 5 of Appendix 11.2 (Document Reference 5.2.11.2)).</p> <p>To ensure comparability across differing data sources, species densities have been calculated across the area of the SCANS block relevant to the Project and the highest density for each species has been applied to the assessment.</p> <p>The worst-case density from across the relevant data sources has been applied to the assessment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	Present densities from other sources for comparison to those from Waggitt et al. (2019) in the submitted ES.	
MOR_028_073_020 623	<p>It is unclear why the correction factor has not been applied to the count from the Isle of Man.</p> <p>Recommendation: Justify, or apply the correction factor, in the submitted ES.</p>	<p>To generate a population estimate, the correction factor was applied to the haul-out count to account for those at sea at the time of survey.</p> <p>The seals counted by Howe (2018) on the IoM were classified as a population estimate not a count, thus the correction factor did not need to be applied.</p>
MOR_028_074_020 623	<p>Figure 1.26 does not show any harbour seal density (based on the key) overlapping the project area. We therefore query how the density has been calculated.</p> <p>Recommendation: The submitted ES should clarify how density of harbour seals in the project area has been calculated.</p>	<p>This issue has been resolved and a corrected map has been presented in Section 5.8 of Appendix 11.2 (Document Reference 5.2.11.2).</p>
MOR_028_075_020 623	<p>The Applicant has not assigned any observations of unidentified species to any species categories. Based on the 1 years' worth of survey data presented at the PEIR stage, there have only been two observations of unidentified species. We acknowledge that assigning these to a species is unlikely to make a material difference because of the low number. However, should more unidentified species be observed in the second year of surveys, further discussion will be needed on how to include these observations in the assessment.</p> <p>Recommendation: To note.</p>	<p>Unidentified marine mammal species have been apportioned to those that have been identified to species level (where appropriate), based on their respective abundance ratio (per survey).</p>
MOR_028_076_020 623	<p>Natural England notes that the worst-case PTS distance from single strike is 660m. This is greater than the standard 500m mitigation zone in the JNCC guidelines for minimising the risk of injury from piling. Therefore a larger mitigation zone should be included in the MMMP when it is produced.</p> <p>Recommendation: To note, use 660m as the minimum size of the mitigation zone in the MMMP.</p>	<p>As precautionary measure the mitigation zone has been extended to cover the potential PTS range. This has been detailed in the Draft MMMP (Document Reference 6.5) and will be confirmed through the final MMMP post-consent.</p>
MOR_028_077_020 623	<p>The magnitude for common dolphin, grey and harbour seal should be low, not negligible, based on the Applicant's definitions. The magnitude for minke whale should be medium, not negligible.</p> <p>Recommendation:</p>	<p>A review has been undertaken of the impacts and potential magnitudes in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3 – Section 11.6.5.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	Update the magnitudes in Table 11.26 and Table 11.27. Update the corresponding impact significance in Table 11.31.	
MOR_028_078_020 623	<p>Natural England has not yet had sight of the draft MMMP. Therefore we cannot agree at this stage that the measures in the MMMP will be sufficient to avoid residual significant effect in EIA terms. We advise that noise abatement systems should be included as an option in the draft MMMP</p> <p>Recommendations: Provide the draft MMMP at the DCO application stage, as already stated by the Applicant. Include noise abatement systems in the draft MMMP</p>	A Draft MMMP (Document Reference 6.5) has been submitted in conjunction with the DCO Application and outlines potential noise abatement systems options.
MOR_028_079_020 623	<p>Natural England welcomes that a range of approaches have been taken to determining disturbance, including EDRs and dose-response curves, as there is no single agreed threshold for disturbance. We acknowledge that there is insufficient data to apply all these methods to all species.</p> <p>Note that as the ADD duration has not been discussed or agreed, nor the noise impact modelled, we cannot agree with the magnitude of the effect at this stage.</p> <p>Recommendation: To note.</p>	Disturbance from ADD has been assessed in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.2. Underwater noise modelling for ADD has not been undertaken, as the type of device to be used was unknown. However, if required, modelling for ADD will be undertaken prior to construction when preparing the final MMMP and EPS Risk Assessment (RA).
MOR_028_080_020 623	<p>Natural England does not agree that the Waggitt et al. (2019) densities for harbour porpoise are more accurate, given that the authors state the densities should not be considered absolute (see earlier comment). We advise that the project-specific densities are used in combination with the dose-response curve.</p> <p>Recommendation: The submitted ES should use the project-specific harbour porpoise densities with the dose-response curve.</p>	<p>In the ES for dose response, the use of site-specific density within the contours within the windfarm site and 10km buffer, and for all contours beyond 10km buffer the density estimate from other available sources has been applied as outlined at ETG 5 (11 October 2023).</p> <p>Further information is available in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.2.</p>
MOR_028_081_020 623	<p>We advise that a 4km distance is used for disturbance from construction vessels, based on Benhemma-Le Gall et al. (2021). The Applicant has used 4km in their assessment of disturbance from non-piling construction activities and their vessels, therefore to use 2km here is not consistent. This is also applicable to paragraph 11.566 (impacts from vessels during operation and maintenance).</p> <p>Recommendation:</p>	At 4km distance to a vessel, harbour porpoise presence was nearly constant at a probability of $p=0.4$ at all vessel intensity levels, indicating that the vessel did not affect the animals. However, at 2km distance from the vessel, the probability of occurrence decreased (with vessel intensity) by ~34%, inferring that the animals were responding to the vessel disturbance and avoided the area. Based on the evasive reaction of the porpoises, most animals would leave the area up until 4km away from the vessel. At this distance, no responses from harbour porpoise were detected (Benhemma-Le Gall et al. (2021).

Unique Reference Identifier	Consultation response received	Applicant response
	The submitted ES should use 4km for assessing disturbance from vessels.	As a precautionary measure, the ES has used 4km for assessing disturbance from vessels.
MOR_028_082_020 623	<p>A more detailed assessment of barrier effects should be presented. Further information should be presented here on the movements of seals between established haul outs and the Morecambe Generation Assets, to understand the potential for a barrier between haul out sites and preferred offshore habitat.</p> <p>Recommendation: The submitted ES should present further information on the movements of seals through and around the wind farm area.</p>	More details have been outlined in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.4.1 and Section 11.7.3.7.
MOR_028_083_020 623	<p>We understand that the number of vessels during the construction period is 2778 for support vessels PLUS 150 for construction vessels, therefore totalling 2928 vessels. Collision risk should be assessed based on this total number.</p> <p>Recommendation: Revise number of vessels in collision risk assessment.</p>	The Applicant notes your response. Updated number of vessels has been used in ES assessment (Chapter 11 Marine Mammals (Document Reference 5.1.11, Table 11.1)).
MOR_028_084_020 623	<p>We query the validity of such a quantitative assessment of collision risk. Particularly as the results for many species are less than 1 – it is not possible for less than 1 animal to experience collision, so the outcomes do not appear biologically relevant. The Applicant themselves also caveat the results notably, stating that in reality it the effect is unlikely to be significant. Further justification on the approach used is needed. Note this is also applicable to the assessment of this pathway during the operation and maintenance phase.</p> <p>Recommendation: The submitted ES should provide further justification for the approach to the assessment of collision risk.</p>	Further detail has been added to this assessment to ensure it was more biologically relevant in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.6 and 11.6.4.6.
MOR_028_085_020 623	<p>Natural England welcomes continued engagement on best practice measures including minimum distances from seal haul-out sites for vessels during the project lifetime. We note that Paragraph 11.781 suggests a 1km avoidance distance which we would be supportive of.</p> <p>Recommendation: To note.</p>	The Applicant notes your response. Measures are included in the Draft MMMP (Document Reference 6.5).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_086_020 623	<p>Natural England welcomes the UXO Assessment undertaken. We acknowledge that the assessment is illustrative at this stage as the UXO clearance Marine Licence will be applied for post-consent. We do not expect that additional information will be available to refine the UXO assessment envelope prior to the Application. The illustrative assessment concludes that UXO clearance activities should not have a significant impact on marine mammal populations so long as appropriate marine mammal mitigation is secured.</p> <p>Subject to the Applicant's commitment to a UXO MMMP and continued engagement with Natural England on the measures in the MMMP, we are content that this Document does not require any further amendments until the time of application for the UXO marine licence. Hence, we will not be providing further comment on this assessment at the DCO/dML Application. We welcome continued engagement on the finer details of the UXO assessment and mitigation measures post-consent.</p> <p>Recommendation: To note.</p>	The Applicant notes your response.
MOR_028_087_020 623	<p>Please clarify what the cut-off period will be for the cumulative screening process.</p> <p>Recommendation: Clarify.</p>	Natural England considered a six month cut-off prior to ES/DCO submission was reasonable as stated in response letter (dated 18/09/2023) to technical note sent on 14/08/2023. This has been agreed at ETG 5 on 11/10/2023.
MOR_028_088_020 623	<p>We note that the content of the tier structure advised by Natural England has been used, however the numbering is different. This makes cross-comparison more difficult.</p> <p>The project-specific Tiers should be added to Table 1.1.</p> <p>Recommendation: Add the project-specific Tiers to Table 1.1 for clarity.</p>	Table 1.1 in Appendix 11.4 (Document Reference 5.2.11.4) shows the Natural England/ Department for Environment Food and Rural Affairs (Defra) Tier system and how this has been applied.
MOR_028_089_020 623	<p>The plan-level floating offshore wind leasing round should be considered.</p> <p>Recommendation: Include the plan-level floating offshore wind leasing round in the submitted ES.</p>	All relevant plans and projects assessed for cumulative effects have been included in the Appendix 11.4 and Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.7. Given the impact ranges of underwater noise a large number of projects related to these effects.
MOR_028_090_020 623	<p>This CEA Screening Document appears wholly focused on impacts from underwater noise. Indeed, Table 1.10 demonstrates it is only looking at disturbance from underwater noise. This is contrary to the Cumulative Effects section (11.7) of Chapter 11, which states that</p>	All relevant plans and projects assessed for cumulative effects have been included in the Appendix 11.4 (Document Reference 5.2.11.4) and Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.7. Given the impact ranges of underwater noise a large number of projects related to these effects.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>pathways other than underwater noise are screened into the cumulative effects assessment. The CEA Document should be updated to ensure consistency with the assessment in Chapter 11.</p> <p>Recommendation: Revise the submitted CEA Document so that it is consistent with the cumulative effects section (11.7) in Chapter 11.</p>	
	<p>We anticipate that the list of projects screened in or out of the CEA will be reviewed at the time of application, to account for any changes. For example, the White Cross Floating OWF application has now been submitted, and Morgan and Mona OWFs have submitted their PEIRs. This also applies to projects currently considered to have insufficient information to inform an assessment, as this may change.</p> <p>Recommendation: Review list of projects in CEA prior to DCO application stage.</p>	<p>All relevant plans and projects assessed for cumulative effects have been included in the Appendix 11.4 (Document Reference 5.2.11.4) and Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.7</p>
MOR_028_091_020 623	<p>We query the overlap of certain projects:</p> <ul style="list-style-type: none"> • White Cross and Inis Ealga Floating OWFs – there is still scope for piling to be within the envelope for floating OWFs, therefore there could be overlap in piling between projects. • Shelmalere OWF – construction is predicted for 2028 which is only one year apart from Morecambe OWF, therefore it would be appropriate to include this in the CEA piling phase overlap in case Morecambe OWF piling timeline was to slip by a year. • Wave and tidal projects – what evidence does that Applicant have that, because they are consented, they should be constructed before Morecambe OWF? • Oil and gas decommissioning activities – to what extent might explosives be used in decommissioning, as this method produces greater noise that would need assessing? • Larne Lough – Paragraph 1.13 of this Document states that projects under judicial review will be treated as Tier 1 IV or V, putting it in the same category as for example OWF projects at application or PEIR stage. Therefore we query why this project has been screened out. • The Applicant states that it is “unknown” whether some projects will overlap with the project’s construction (wave, gas storage, offshore mining, carbon capture projects). We query how these unknown projects will be assessed. <p>Recommendation:</p>	<p>White Cross As the ES has now been submitted, updates have now been taken forward in the CEA.</p> <p>-Shelmalere OWF and Inis Ealga Floating While these projects were awarded a Maritime Area Consents (MAC) in 2022 they were not successful in the Offshore Renewable Electricity Support Scheme (ORESS) auction. As such there was uncertainty on the consenting timescale for these projects. The three projects on the east coast that were successful (North Irish Sea Array (Statkraft, 500 MW), Dublin Array (RWE and Saorgus Energy, up to 850 MW), Codling Wind Park (EDF and Fred Olsen, up to 1,450 MW) have been considered, on a precautionary basis, to have the potential for overlap of construction activities, but not piling, and have been included in the CEA.</p> <p>Wave and tidal projects The following projects have been screened in:</p> <p>Marine Energy Test Area (META) Dale Road, META East Pickard Bay, META Warrior Way: The sites were operational, in that they have been granted a Marine Licence and that technology developers can test their technology. There was no permanent infrastructure associated at the time of assessment. Relevant authorities will be notified prior to each deployment. The activities that could take place include drilled pin piling, use of vessels over the course of 3 days (as stated in the Marine License). The sites were located in or just outside Milford Haven and were insignificant to the CEA. It was considered unlikely given the timescales that overlap of construction</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Clarify on the points raised is needed. Update the Cumulative effects section in Chapter 11 as necessary.</p>	<p>activities would be likely, however the impact pathways have been considered in the CEA.</p> <p>Morlais: landfall and cabling was nearing completion, the first turbines are due to be installed in 2026, in a 1-year construction window (www.morlaisenergy.com/tidal-energy/). Morlais is this likely to be operational by the time Morecambe is planned to commence construction in 2027.</p> <p>O&G decommissioning activities</p> <p>It has been noted that explosives used for decommissioning could have a financial benefit (BSEE, 2015) and may therefore be more attractive than conventional cutting methods. Using explosives would be high peaked, but brief impulsive underwater noises “with near peak energy at frequencies of 10–200 Hz before attenuation” (Brand, 2021). Whether a project will be using explosives for decommissioning is project specific. Decommissioning plans were available for the nearby platforms DP3 and DP4, where cutting methods were being deployed, but these had already been completed and thus there was no overlap with the construction of Morecambe and thus not included in the CEA. There were no other decommissioning plans or clear timelines upon which to base an assessment, noting that the Project is in proximity to the Morecambe Cluster Carbon Capture Storage project which has been assessed as a separate CEA project.</p> <p>Larne Lough: As of February 2024 judgment has been reserved in a legal bid to halt the construction of gas storage caverns under Larne Lough and parties await for the Court of Appeals' decision on the case. The facility has been reviewed as PINS Tier 1. The current marine licence is valid from 2021 to 2026, thus there would be no overlap with Project construction and has therefore been screened out from further consideration at this time.</p> <p>Unknown projects: If there was sufficient information on which to make an assessment for those projects, and it was likely that they will go ahead and be undertaken at the same time as Morecambe, then they have been included. All relevant information has been included in the ES and where uncertainly lay the limitations have been noted. The CEA has been undertaken based on the information at the time of writing (with a cut-off of six months prior to ES submission).</p> <p>It has been proposed that the CEA will be reviewed, updated and consulted on prior to construction for the Marine Wildlife Licence Risk Assessment.</p>
MOR_028_092_020 623	<p>Table 1.10 omits OWF projects that will enter the operational phase and so overlap with Morecambe OWF, such as Erebus. This is inconsistent with Table 1.2 which states that projects in this phase will be considered in the operational scenario. Please clarify.</p> <p>Recommendation:</p>	<p>All relevant projects assessed for their operational cumulative effects have been included in the Appendix 11.4 (Document Reference 5.2.11.4) and Chapter 11 Marine Mammals (5.1.11), Section 11.7</p>

Unique Reference Identifier	Consultation response received	Applicant response
	Clarify this inconsistency in the submitted ES.	
MOR_028_093_020 623	<p>As previously commented, we have concerns with the use of densities from Waggitt et al. (2019) in this way.</p> <p>Recommendation: Present densities from other sources for comparison to the densities from Waggitt et al. (2019) in the submitted ES.</p>	The limitations with the Waggitt et al. (2019) data have been noted, Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.4.6 presents all available densities for each cetacean species and took the most appropriate worst-case as precautionary approach.
MOR_028_094_020 623	<p>No grey seal density estimate has been presented for the Isle of Man MU. The Applicant should clarify how this MU has been considered.</p> <p>Recommendation: Clarify how the Isle of Man MU has been considered in the submitted ES.</p>	The density for the IoM MU has been calculated using Carter et al. (2022); see Section 1.2.6 in Appendix 11.4 (Document Reference 5.2.11.4).
MOR_028_095_020 623	<p>It is not clear why the Applicant has included a density estimate for harbour seals from MU 14 when this MU is not part of the Reference population. We would not advise this density being used, and indeed as it is much higher it could lead to over-inflated impacts.</p> <p>Recommendation: Consider whether this MU density is appropriate for inclusion.</p>	The MU 14 NI MU has been included as part of the Reference population. Please see Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.5.8: “The total Reference population for the assessment was 1,143 harbour seal, assuming that that all seals are from the nearest MU, the NW England MU and NI MU” and see overview of included MUs in Section 5.8 of Appendix 11.2 (Document Reference 5.2.11.2). It was noted that two closest MUs have been used given the proximity of the Project.
MOR_028_096_020 623	<p>The Applicant has applied the disturbance distances from the Project to other projects, however they have not demonstrated why their assessment results are applicable to other projects or that they are the worst-case. We do not agree that this project’s impact ranges can be considered a “standard impact range for disturbance.” Natural England advises that, where available, the Applicant presents the other projects’ project-specific disturbance ranges.</p> <p>Recommendations: The submitted ES should present the disturbance ranges from other projects’ project specific assessments.</p>	Wherever possible, project-specific data was applied for impact ranges to the assessment. If such data were omitted, the Applicant continued to apply known disturbance ranges based on data from the Project or from available scientific literature using the worst-case.
MOR_028_097_020 623	<p>We request further information on the likely piling activities for the Morgan and Morecambe Transmission Assets, to demonstrate the appropriateness of using a 26km EDR for disturbance for this project.</p> <p>Recommendation: Provide further information on the likely piling activities for the Morgan and Morecambe Transmission Assets, at the DCO Application stage.</p>	The 26km EDR was based on a monopile without mitigation. The Transmission Assets may use a monopile to install the Morgan booster station. As such 26km has been used as an appropriate worst-case.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_098_020 623	<p>The CEA assessment reflects the contribution of projects in the screening area to harbour porpoise disturbance. The number of animals are then presented as a proportion of the CIS MU. However, the screening area is smaller than the CIS MU, creating a mismatch between the spatial scale of the impact and the Reference population. Indeed, the cumulative effects of projects in the screening area are likely to affect a subset of the CIS MU, rather than the population as a whole. Therefore presenting the numbers impacted as a percentage of the whole CIS MU may downplay the potential significance of this impact. This point should be acknowledged in the assessment. We welcome further discussion with the Applicant on how to improve the assessment in this regard.</p> <p>Recommendation: Acknowledge the point raised in the assessment. We would welcome discussion on how this can be improved in the final assessment through the ETG.</p>	<p>The screening of projects within the entire coverage of the harbour porpoise Celtic and Irish Sea MU has been undertaken (Appendix 11.4 (Document Reference 5.2.11.4)). Projects have been assessed based on their Tier and available information at the time of the assessment.</p>
MOR_028_099_020 623	<p>The Applicant has set the threshold for significant effect from temporary impacts as over 5%. It is not appropriate to say that 5.09% is not significant because it is only 0.09% over the threshold. To downgrade the assessment conclusion in this way is not conservative and does not reflect the worst-case scenario of a significant impact.</p> <p>Recommendation: Amend Paragraph 11.701 in the submitted ES to acknowledge the worst-case scenario of a significant effect (>5% of the harbour porpoise population being affected).</p>	<p>The Applicant notes your response. Changes have been made as necessary.</p>
MOR_028_100_020 623	<p>Natural England does not agree that geophysical surveys can be treated as a point source, as they are mobile and can cover notable area in a day. The Applicant has not presented evidence to demonstrate that animals would return to the area once the vessel has passed. Note this is also applicable to seismic surveys.</p> <p>Recommendation: The submitted ES should assess geophysical and seismic surveys as mobile sources rather than point sources.</p>	<p>Where relevant, point sources were assessed as moving sources. It should be noted, however, that assuming a moving source may overestimate the number of marine mammals at potential risk. At some point in the day, marine mammals would recover from the disturbance and return to the area, rather than staying away for the whole day, which was what the moving source assessment assumed.</p>
MOR_028_101_020 623	<p>We note that, at this stage, the Applicant has identified the potential for a significant cumulative effect from underwater noise disturbance in EIA terms. Natural England welcomes continued engagement on the impact assessment outcomes, including likely changes following full analysis of the two years of project-specific data, and the potential need for further</p>	<p>Population modelling has been undertaken to determine whether there was a risk to the population from the Project-alone and for cumulative effects in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6 and 11.7.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>mitigation. We also welcome further engagement on the scenario under which population modelling of disturbance would be required.</p> <p>Recommendation: To note.</p>	
MOR_028_102_020 623	<p>The Applicant has assessed three pathways for disturbance, from piling, other construction activities, and vessels. However, it is not clear whether the possible additive effects of these pathways have been considered. Information should be presented on the potential for temporal and spatial overlap between these pathways, to inform potential additive effects. It should also be taken into account that non-piling activities may occur on days without piling, and that not all animals may respond to piling (as per the dose-response curve).</p> <p>Recommendation: The submitted ES should present further information on the three disturbance pathways to demonstrate potential additive nature of these effects, and assess if needed.</p>	Interactions between the various disturbance pathways have been discussed in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.10
MOR_028_103_020 623	<p>Natural England considers that all relevant SACs with marine mammal features in English waters have been screened in.</p> <p>Recommendation: Agreement.</p>	The Applicant notes your response.
MOR_028_104_020 623	<p>The relevant SNCB for the Republic of Ireland has not signed up to the JNCC et al. 2019 guidance on harbour porpoise SACs. Therefore, the approach to determine the site population for Rockabill to Dalkey Island SAC should be checked with the relevant SNCB.</p> <p>Recommendation: Check the approach to determine the site population with the relevant SNCB.</p>	The Applicant notes your response. The site-specific conservation objectives have been taken into account for the assessment in Section 9.4.1.4 in the RIAA (Document Reference 4.9). Consultation with NPWS has also been sought.
MOR_028_105_020 623	<p>Please note that it is Natural England's remit to provide advice on the assessment in so much as it relates to SACs in English waters. We defer to the relevant SNCBs on the appropriate approach for assessing SACs outside English waters.</p> <p>For clarity, we have only reviewed the assessment of SACs for harbour porpoise.</p> <p>Recommendation: To note.</p>	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_106_020 623	<p>Natural England considers that the winter density of harbour porpoise would be more appropriate to use when assessing impacts to the Bristol Channel Approaches SAC. This specific SAC is only in effect during winter, therefore there is only an impact pathway with the site during the winter months.</p> <p>Recommendation: The submitted ES should use a winter-specific density when assessing impacts to the Bristol Channel Approaches SAC.</p>	<p>The highest density for harbour porpoise (summer average) has been applied to the assessments as the worst-case for potential effects and evaluated at the management unit level for the CIS. Therefore, any potential effects during the winter season would be expected to be less than assessed.</p>
MOR_028_107_020 623	<p>The conclusion of no significant effect References the mitigation to be detailed in the piling MMMP. A draft piling MMMP will be submitted with the DCO Application. Natural England cannot provide a view on the assessment conclusion for the pathway of “physical and permanent auditory injury” until the draft MMMP has been provided.</p> <p>Recommendation: Provide the draft piling MMMP with the DCO Application (already proposed by the Applicant).</p>	<p>The draft MMMP (Document Reference 6.5) has been provided as part of the DCO Application.</p>
MOR_028_108_020 623	<p>Paragraph 1.675 states that both 2km and 4km has been used for disturbance from construction vessels. Based on the text here, it appears 4km would be an appropriate WCS for disturbance from construction vessels. The areas of disturbance in the assessment should be reviewed to ensure they reflect 4km rather than 2km.</p> <p>This is also applicable to the similar assessment of disturbance from vessels during operation.</p> <p>Note that our assessment is based on the number of vessels that could be on site at any one time, as this is the WCS.</p> <p>Recommendation: Use 4km for harbour porpoise disturbance from construction and operation vessels, and revise the final assessment accordingly.</p>	<p>Benhemma-Le Gall et al. (2021) indicated that at 4km distance to a vessel, harbour porpoise presence was nearly constant at a probability of 40% at all vessel intensity levels, indicating that the vessel did not affect the animals.</p> <p>However, at 2km distance from the vessel, the probability of occurrence decreased (with vessel intensity) by ~34%, inferring that the animals were responding to the vessel disturbance and avoided the area.</p> <p>Therefore, as a precautionary approach, 4km has been used in assessing disturbance from vessels.</p>
MOR_028_109_020 623	<p>Whilst disturbance from piling will likely encompass the array area, we query whether it would encompass disturbance from possible cable laying activities, including vessels, along the cable route. Further consideration is needed on whether there is the potential for additive effects in this scenario.</p> <p>Recommendation: The submitted ES should consider potential additive disturbance effects between piling and activities along the cable route.</p>	<p>All noise sources are considered in the ES, with a section also added in the cumulative assessment to consider the Transmission Assets (including the export cable route)</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_110_020 623	<p>The conclusion of no significant effect References the mitigation to be detailed in the PEMP. A draft piling MMMP will be submitted with the DCO Application. Natural England cannot provide a view on the assessment conclusion for the pathway of “vessel interactions” until the PEMP has been provided.</p> <p>Recommendation: Provide the PEMP with the DCO Application</p>	An outline PEMP (Document Reference 6.2) has been provided with the DCO Application.
MOR_028_111_020 623	<p>We consider that the terminology in the in-combination assessments section should be clarified, to make it clearer what is being concluded. For example, the Applicant concludes “that there would be no significant in-combination effect on the harbour porpoise CIS MU population during construction” from PTS, and that “the potential risk of PTS is not considered further”. This conclusion has not been presented in standard HRA terms - it does not Reference LSE or AEol, nor does it present the conclusion relative to the SAC – which means it is difficult to agree with the conclusions. A new table, or an expansion on Table 9.44, that presents the conclusions for each pathway could help for clarity.</p> <p>Note that the RIAA, once revised for clarity, should be checked against the CEA to ensure that the approach is consistent, on what pathways do have potential for a cumulative/in-combination effect for example.</p> <p>Recommendation: Clarify the wording in the submitted RIAA.</p>	Wording has been clarified within in-combination sections of assessments.
MOR_028_112_020 623	<p>Please review our earlier advice regarding the ES Chapter 11 to determine those relevant to the RIAA.</p> <p>Any changes made in light of our advice on the Cumulative Effects assessment should be tracked through to the in-combination assessment in the RIAA, where relevant.</p> <p>Recommendation: Ensure relevant changes made to the submitted ES are also made in the RIAA.</p>	Changes made to the Chapter 11 Marine Mammals (Document Reference 5.1.11) have been reflected in the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9).
MOR_028_113_020 623	The Applicant has identified that up to 13% of the CIS MU population of harbour porpoise may be disturbed at any one time from all projects in-combination. Whilst we acknowledge no spatial overlap between the Project and the Bristol Channel Approaches SAC, our concern is whether this level of in-combination disturbance could impact the ability of harbour porpoise to remain a viable component of the site (Conservation Objective 1). We welcome further engagement on	Population modelling has been undertaken to assess a population level effect and if there would be any AEol.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>potential further assessment/mitigation to demonstrate/ensure that no adverse effect on site integrity could occur.</p> <p>Recommendation: Continue engagement on potential further assessment/mitigation of in-combination disturbance effects to demonstrate no AEol to harbour porpoise SACs.</p>	
MOR_028_114_020 623	<p>Only 12 months of Digital Aerial Survey data are available. Although a further 12 months have been collected, they are not presented and analysed for review in the PEIR and associated Documents.</p> <p>Recommendation: Natural England highlights the risk that the additional data analysis could have the potential to change the conclusions of the submitted Environmental Statement (ES) from those set out in the PEIR, and raise new issues not flagged by the PEIR assessments. More generally, NE advises that 24 months of survey effort is the minimum expected evidence standard for bird and marine mammal data.</p>	<p>The ES includes the full 24 months of digital aerial survey data. Project-alone and cumulative impact assessments have been updated accordingly since PEIR in Sections 12.6 and 12.7 in Chapter 11 Marine Mammals (Document Reference 5.1.11).</p>
MOR_028_115_020 623	<p>The cumulative and in-combination assessments do not factor in impacts from a number of other projects due to a lack of data. Unknown impacts have been treated as zero which will inevitably underestimate impacts, potentially significantly. A qualitative assessment is mentioned for consideration of some projects, but this process is not detailed, or the results fully presented. In some cases projects with impacts considered to be negligible have been screened out of in-combination assessment. Natural England consider this approach to be unacceptable, and hence consider it inappropriate to comment on the potential significance of cumulative and in-combination impacts presented in the PEIR submission.</p> <p>Recommendations: Natural England propose working collaboratively with stakeholders through ETG meetings to generate suitable impact estimates for historic projects and facilitate comprehensive, quantitative cumulative and in-combination assessments.</p> <p>Generally, Natural England consider that data used for historic projects should be updated to reflect contemporary input parameters and methods wherever practicable.</p> <p>For the avoidance of doubt, Natural England advise that all relevant project-alone impacts are considered when calculating cumulative and</p>	<p>The approach undertaken in the Environmental Statement (ES) was considered appropriate to assess cumulative impacts on seabirds. The cumulative assessment has been updated taking into account historic projects; refer to Sections 12.4.4 and 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>in-combination totals. I.e., impacts deemed to be negligible alone should not be scoped out. This is to counter the risk that many such impacts could become significant when considered as a whole.</p>	
<p>MOR_028_116_020 623</p>	<p>Natural England consider the calculation of an 'effective displacement area' to be fundamentally flawed and misleading. There is no logical way to proportionally reduce the area of effective habitat loss by the expected level of displacement. The displaced proportion of the population cannot use any of the area, i.e., displacement is occurring over the full extent of the area. Birds that are not displaced are likely (but not necessarily) dispersed over the entire area. Ultimately, calculating a (reduced) area of effect in this way risks underestimating the % of the SPA that is subject to displacement effects.</p> <p>Natural England consider that it is appropriate to take into account the original SPA boundary when calculating the area of red-throated diver supporting habitat within the SPA that would be affected by the project, though given red-throated diver are likely to be present beyond the original boundary, albeit in lower densities, there is merit in presenting displacement values that include as well as exclude those parts of the SPA that fall beyond the original boundary.</p> <p>Recommendations:</p> <p>Calculate the area of effect within the SPA based on the overall area subject to displacement effects, rather than reducing the area proportionally according to the level of displacement of red-throated diver expected to occur.</p> <p>Present displacement values that both include and exclude those parts of the SPA that fall beyond the original boundary.</p> <p>Natural England also advise that the area of the SPA subject to displacement for red-throated diver is considered in-combination with other plans and projects.</p>	<p>The Applicant does not agree that application of the displacement gradient to the effective area of displacement was without merit. It has been established that the displacement effect would diminish as distance from the windfarm increases, and therefore it was logical to conclude that the effective area would also be reduced. It has been acknowledged that the application of the Natural England gradient was a proxy, but it should be noted that the total (uncorrected) values have also been presented for comparison.</p> <p>Displacement values for both the original and updated SPA boundary have been presented in the RIAA (Document Reference 4.9).</p>
<p>MOR_028_117_020 623</p>	<p>The in-combination assessment suggests a 60% increase in baseline mortality for non-breeding lesser black-backed gull at Morecambe Bay and Duddon Estuary SPA yet concludes that an adverse effect is unlikely.</p> <p>NE accepts that the mortality estimate is likely to be precautionary, and the apportioning of impacts may be problematic. However, we highlight the obvious need for thorough investigation into this impact, including through PVA.</p> <p>Tracking studies are used to evidence that the apportioning undertaken is not appropriate for the consideration of impacts. Natural England</p>	<p>Project-alone and in-combination assessments in the RIAA have been updated with the full 24 months of baseline survey data. In respect of lesser black-backed gull, it was concluded that there would be no meaningful mortality contribution from the Project, and therefore no in-combination assessment was required. However, in-combination estimates (including PVA) have been presented as context to the assessment, but without prejudice to the conclusion of no adverse effect on integrity. PVA (EIA) has been undertaken for great black-backed gull cumulative collision risk; refer to Section 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>consider this suggests an alternative approach to apportioning should be investigated.</p> <p>recommendations:</p> <p>Revisit the project alone and in-combination assessments to account for the complete baseline survey data and any updates to cumulative and in-combination totals.</p> <p>Undertake PVA modelling to investigate increases in baseline mortality of >1%.</p> <p>Investigate the possibility of utilising tracking data and other relevant evidence to generate defensible apportioning of lesser-black backed gull impacts to SPAs.</p> <p>Natural England reiterate our advice to follow the mitigation hierarchy and reduce the potential impacts of the project by increasing the minimum rotor clearance above LAT.</p>	
MOR_028_118_020 623	<p>The minimum rotor clearance above sea level is 22m.</p> <p>Recommendation:</p> <p>Natural England highlight that increasing the minimum rotor clearance would reduce collision risk estimates generated by the project and request that the Applicant explore the feasibility of achieving greater clearance.</p>	<p>It was noted that the Natural England response referred to rotor clearance above LAT, but the Design Envelope provided in the PEIR assessment was 22m minimum above Highest Astronomical Tide (HAT). This was equivalent to approximately ~32m above LAT. Following stakeholder consultation, the rotor clearance above sea level (air gap) has been increased to 25m above HAT (i.e. ~35m above LAT). This air gap has been used as the basis for collision risk estimates in the ES; refer to Sections 12.3.2 - 12.3.3 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_028_119_020 623	<p>Only 12 months of Digital Aerial Survey data are available. Although a further 12 months have been collected, they are not presented and analysed for review in the PEIR and associated Documents.</p> <p>Recommendation:</p> <p>Natural England highlights the risk that the additional data analysis could have the potential to change the conclusions of the submitted Environmental Statement (ES) from those set out in the PEIR, and raise new issues not flagged by the PEIR assessments. More generally, NE advises that 24 months of survey effort is the minimum expected evidence standard for bird and marine mammal data.</p>	<p>The ES includes the full 24 months of digital aerial survey data. Project-alone and cumulative impact assessments have been updated accordingly since PEIR in Sections 12.6 and 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_028_120_020 623	<p>Natural England note that species identifications are given confidence levels of definite, possible, or probable. All such records are treated as positively identified to generate an 'ID rate'. Natural England do not consider a generic rate, incorporating all species, to be particularly</p>	<p>Annex VII of Appendix 12.2 (Document Reference 5.2.12.2) presents the identification confidence levels for each species across the survey period. The average monthly identification rate has been checked and an average of 96.05% was obtained.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>useful or informative. Natural England note that most birds (76%) with no species ID were potentially auks (Table 5).</p> <p>Further, we note that the calculation of the average rate appears to be incorrect.</p> <p>Recommendation: Update Table 3 to describe the data more fully in the submitted ES. Present proportions of data assigned to all categories (i.e., possible, probable, and definite). Furthermore, Natural England request that this is also undertaken for each species (for individual surveys) to facilitate review of the variability of ID rates.</p> <p>Natural England calculate the average of the monthly ID rate figures given in Table 3 as 95.76% and therefore suggest this is QA'd.</p>	
MOR_028_121_020 623	<p>Natural England highlight some inconsequential errors in seasons presented in Table 1.7. E.g., black-headed gull and common gull is defined as breeding Apr-Jul whereas the Reference used (SNH, 2014) states Apr-Aug.</p> <p>Recommendation: Review table to ensure correct seasons are identified in the submitted ES.</p>	The relevant table in the ES (Table 12.15 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12)) has been checked and corrected to ensure consistency with References used.
MOR_028_122_020 623	<p>Natural England notes the forthcoming publication of “Densities of qualifying species within Liverpool Bay / Bae Lerpwl SPA: 2015 to 2020” which will provide up to date density estimates for red-throated diver, common scoter and the waterbird assemblage within the original SPA boundary.</p> <p>Recommendation: The most up to date data available should be considered for impact assessment. Natural England will alert the developer as soon as we are able to share this report.</p>	The publication (HiDef 2023) has been considered in the RIAA (Document Reference 4.9).
MOR_028_123_020 623	<p>Natural England highlight that Manx shearwater is a surface diving species and data are available detailing foraging & diving behaviour. It may also be appropriate to consider availability bias for that species.</p> <p>Recommendation: Discuss the calculation and application of an availability bias correction factor for Manx shearwater at future ETG meetings.</p>	There was insufficient peer-reviewed data at the time of the ES assessment for other surface diving species such as Manx shearwater, therefore the availability bias correction has been limited to auk species (refer to Appendix 12.2 (Document Reference 5.2.12.2)).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_124_020 623	<p>“The assessment approach accords with best practice and guidance”</p> <p>Recommendation: Natural England welcome the commitment to undertake the assessment in accordance with our best practice guidance.</p>	The offshore ornithology impact assessment in the ES has been undertaken in accordance with Natural England’s best practice guidance (refer to Section 12.4.1.2) in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).
MOR_028_125_020 623	<p>The Manx Shearwater peak abundance figure is the same as the 95% UCI</p> <p>Recommendation: QA figures to ensure correct values are presented in the submitted ES.</p>	Minor error corrected in the ES, now reflecting the full 24 month survey results
MOR_028_126_020 623	<p>The use of peak density estimates in assessments is described as “highly precautionary” throughout.</p> <p>Recommendation: NE disagrees with the characterisation of the use of peak density estimates as necessarily being “highly precautionary” and recommends an alternative approach is taken in the submitted ES, reflecting that this method partially accounts for the high levels of uncertainty in a ‘snapshot’ DAS being representative.</p>	References to “highly precautionary” in the assessment have been removed from the ES, although where there was uncertainty the need for precaution has been acknowledged
MOR_028_127_020 623	<p>Manx shearwater has been screened out of assessment for disturbance and displacement during construction. There is no specific justification for this decision. Natural England note that the relative species abundance in the study area is high and there is low confidence in the (low) sensitivity to OWF disturbance and displacement estimate.</p> <p>Recommendation: Natural England advise that Manx shearwater should be fully considered within the construction disturbance and displacement assessment on a precautionary basis, as for the operational phase assessment.</p>	Manx shearwater were generally considered to have a low susceptibility to disturbance and displacement, particularly during windfarm construction, based on previous studies e.g. Bradbury et al. (2014). However, on a precautionary basis, Manx shearwater have been included in the assessment of construction displacement in the ES (refer to Section 12.6.2.1 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12)).
MOR_028_128_020 623	<p>Natural England welcome the presentation of full displacement matrix tables, with shading of realistic scenarios. It would be extremely useful if any cells that identify an impact leading to a >1% increase in baseline mortality for the relevant population were also highlighted.</p> <p>Recommendation: In the submitted ES, apply red shading to any cells in the displacement matrix that contain a mortality estimate that would increase baseline mortality by >1%</p>	Any impacts leading to an increase in baseline mortality of >1% have been highlighted where appropriate in Sections 12.6 and 12.7.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_129_020 623	<p>Minor error – common scoter mean peak site + 4km buffer population reported as 0.1 individuals</p> <p>Recommendation: QA figures. In this case it appears the density instead of the abundance estimate has been used in the text.</p>	<p>Density and abundance estimates for the full 24 months of data have been reviewed and presented in the relevant sections of the Chapter 12 Offshore Ornithology (Document Reference 5.1.12) and Appendix 12.1 (Document Reference 5.2.12.1).</p>
MOR_028_130_020 623	<p>Breeding season populations for EIA are calculated by adding the breeding populations within mean-max foraging range + 1SD to the immature birds from the preceding BDMPS population, on the assumption that those birds will remain in the area. Natural England are not convinced that this method is appropriate or suitably evidence based.</p> <p>Recommendation: Natural England propose discussing the approach to calculation of regional breeding populations through ETG meetings to reach agreement with relevant stakeholders and ensure consistency across relevant projects.</p>	<p>Natural England's preferred approach using the largest regional BDMPS breeding season population has been adopted for the ES.</p>
MOR_028_131_020 623	<p>Natural England use guillemot as an example to question if any figures presented for cumulative mortality can be considered highly precautionary when they do not consider impacts from the majority of wind farms scoped into the assessment. No qualitative assessment is apparent. In this case we highlight that a >1% increase in baseline mortality is identified using a worst-case displacement impact scenario. Natural England consider this demonstrates the need to fill the data gaps identified during CEA.</p> <p>Recommendation: See other comments regarding cumulative and in-combination assessment. This topic requires further discussion in the ETG.</p>	<p>The approach undertaken in the ES was considered appropriate to assess cumulative impacts on seabirds. The cumulative assessment has been updated taking into account historic projects; refer to Section 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_028_132_020 623	<p>It is incorrect to conclude that the higher mortality value for the red-throated diver cumulative assessment would not materially alter the background mortality of the population. That is only true when assessing against the biogeographic population. NE guidance states that mortality should be considered against the largest BDMPS (as in paragraph 12.322).</p> <p>Recommendation: NE advises that increases in baseline mortality are assessed against the largest BDMPS rather than the total biogeographic population for EIA.</p>	<p>Mortality has been considered within the ES against the largest BDMPS and the biogeographic population. The maximum values were considered to be precautionary, and very unlikely to reflect the actual effect; the lower value (i.e. reflecting a displacement rate of 100% and mortality of 1%) was considered more realistic but still precautionary (Section 12.6.3.1 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12)).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	Further, Natural England again highlight the need to fully quantify and consider impacts from all relevant projects for cumulative and in-combination assessment.	
MOR_028_133_020 623	<p>Construction displacement impacts only consider three 2km radius circles around individual turbines. Mention is made that the disturbance effect will incrementally increase as the array is built but this is not properly considered.</p> <p>Recommendation: Natural England advises that (in line with other projects) construction phase displacement impacts are simply assumed to be equivalent to 50% of operational and maintenance phase impacts to account for the incremental development of the array.</p>	For the ES construction phase displacement impacts have been assumed to be 50% of operational and maintenance phase impacts; refer to Section 12.6.2.1 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).
MOR_028_134_020 623	<p>Construction and maintenance vessel routes have not been considered.</p> <p>Recommendation: NE advises that some indication should be given as to where construction and maintenance vessels are likely to sail from as well as the likely increase in vessels activity. As a minimum, routes through the Liverpool Bay SPA should follow best practice protocols (including adhering to existing routes wherever possible) to minimise disturbance to common scoter and red-throated diver. Subject to more information being provided, the need for seasonal restrictions may require consideration (1st November – 31st March inclusive).</p>	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection will be made post consent.</p> <p>It has been assumed in the Environmental Statement and Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) that, in a worst-case scenario, operation and maintenance vessel movements would cross Liverpool Bay SPA. Embedded mitigation includes restricting vessel movements where possible to existing navigation routes, and best practice vessel management; refer to Section 12.3.3 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_028_135_020 623	<p>A 4km buffer has been used for assessing displacement impacts on red-throated diver, NE advise the use of a graduated 10km buffer.</p> <p>Recommendation: NE notes the statement that there was insufficient data to assess graduated displacement over 10km buffer. This should be reviewed for analysis of the full data set. Natural England also highlight the potential to consider other relevant data sources if the projects survey data proves insufficient (e.g. Mapping Seabird Sensitivity to Offshore Wind Farms)</p>	Natural England confirmed during the fifth ETG meeting (12th October 2023) that a 4km buffer for red-throated diver was acceptable for the EIA (but noting that a 10km buffer has been used for the RIAA).
MOR_028_136_020 623	<p>A value of 1% is given for curlew PCH.</p> <p>Natural England also note that ideally, CRM would be undertaken for the range of PCH values presented in Wright et al (2012), e.g. for waders estimate impacts for 5% and 75% PCH in addition to 25%.</p> <p>Recommendation: QA or justify PCH value used for curlew CRM.</p>	Reference to 1% was a transcription error. Migrant CRM PCH values have been revisited and amended where appropriate; refer to Section 12.6.3.2.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Consider modelling the range of PCH values to reflect high levels of uncertainty regarding flight heights. A pragmatic approach might identify any instances where more detailed investigation appears warranted.</p>	
MOR_028_137_020 623	<p>Natural England note that we do not consider assessing mortality increase at the total biogeographic population scale to be relevant for EIA.</p> <p>Recommendation: Consider if useful context is added by consideration of increase in mortality rate against the total biogeographic population. If not, we suggest the report could be made more concise by removing this text.</p>	<p>Annual mortalities within the ES have been assessed against both the biogeographic populations and the largest BDMPS to indicate the range of likely effects.</p>
MOR_028_138_020 623	<p>The cumulative (and in-combination) assessments do not factor in impacts from a number of other projects due to a lack of data. Unknown impacts have been treated as zero which will inevitably underestimate impacts, potentially significantly. A qualitative assessment is mentioned for consideration of some projects, but this process is not detailed, or the results fully presented. Natural England consider this approach to be unacceptable, and hence consider it inappropriate to comment on the potential significance of cumulative (or in-combination) presented in the PEIR submission.</p> <p>Recommendation: Natural England propose working collaboratively with stakeholders through ETG meetings to generate suitable impact estimates for historic projects and facilitate comprehensive, quantitative cumulative and in-combination assessments. Generally, Natural England consider that data used for historic projects should be updated to reflect contemporary input parameters and methods wherever practicable</p>	<p>The approach undertaken in the Environmental Statement (ES) was considered appropriate to assess cumulative impacts on seabirds. The cumulative assessment has been updated taking into account historic projects; refer to Sections 12.4.4 and 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_028_139_020 623	<p>Breeding season apportioning has been undertaken using the NatureScot apportioning tool. Natural England retain some concerns regarding the current limitations of this approach and the apportioning values generated. However, updates to the method are being progressed through the ORJIP AppSaS project that we hope will address these concerns.</p> <p>Recommendation: Monitor the progress of the AppSaS project and any updated apportioning methodologies. Continue to engage with relevant stakeholders through the ETG to agree the approach.</p>	<p>The ORJIP AppSaS tool has not been made available in time for the DCO submission. Apportioning to SPA populations in the RIAA has therefore been undertaken using the NatureScot apportioning tool. This approach was agreed with Natural England through the ETG (12 October 2023).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_140_020 623	<p>The use of a 100km buffer to screen sites for migratory non-seabirds is not a standard approach, though we recognise the need to identify a proportionate set of SPAs for a more detailed assessment.</p> <p>Recommendation: We recommend further discussion of the merits of this approach in the ETG.</p>	<p>The approach to assessing migratory non-seabird collision risk (presented during the second ETG meeting on 07/09/2022) was considered appropriate to screen sites for migratory non-seabirds; refer to Section 12.6.3.2 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12). The approach was agreed with Natural England at a meeting on 25th September 2023.</p>
MOR_028_141_020 623	<p>Natural England note that for seabirds in the non-breeding season potential connectivity has been assumed for SPA populations that contribute >1% of the BDMPS population. Whilst not in a position to confirm wider applicability of this method at this stage, Natural England considers it broadly appropriate for this particular project.</p> <p>Recommendation: n/a</p>	<p>Impacts on SPA seabird populations have been considered in the RIAA (Document Reference 4.9).</p>
MOR_028_142_020 623	<p>The method stated in paragraph 213 appears to be incorrect, “the percentage of the SPA population estimated to be present within the BDMPS region during the non-breeding season has been calculated”. Natural England understand that the percentage of the BDMPS which is from the SPA (considering birds of all ages classes) has been calculated & presented in Table 8.5, for which the legend is correct.</p> <p>Recommendation: Clarify text in the submitted ES.</p>	<p>This was an error; the approach detailed in the legend for Table 8.5 of the HRA Screening Report (Document Reference 4.10) is correct.</p>
MOR_028_143_020 623	<p>Error in the figure given for common scoter abundance.</p> <p>Recommendation: Check and amend in the submitted ES.</p>	<p>Common scoter abundance estimates have been checked and updated based on the full 24 months of baseline data, as presented in the RIAA</p>
MOR_028_144_020 623	<p>Breeding season apportioning has been undertaken using the NatureScot apportioning tool. Natural England retain some concerns regarding the current limitations of this approach. However, an updated method is being progressed through the ORJIP AppSaS project that we hope will address these concerns.</p> <p>Recommendation: Monitor the progress of the AppSaS project and any updated apportioning methodologies. Continue to engage with relevant stakeholders through the ETG to agree the approach.</p>	<p>The ORJIP AppSaS tool has not been made available in time for the DCO submission. Apportioning to SPA populations in the RIAA has therefore been undertaken using the NatureScot apportioning tool. This approach was agreed with Natural England through the ETG (12th October 2023).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_145_020 623	<p>Natural England consider the calculation of an 'effective displacement area' to be fundamentally flawed and misleading. There is no logical way to proportionally reduce the area of effective habitat loss by the expected level of displacement. The displaced proportion of the population cannot use any of the area, i.e., displacement is occurring over the full extent of the area. Birds that are not displaced are likely (but not necessarily) dispersed over the entire area. Ultimately, calculating a (reduced) area of effect in this way risks underestimating the % of the SPA that is subject to displacement effects.</p> <p>Natural England consider that it is appropriate to take into account the original SPA boundary when calculating the area of red-throated diver supporting habitat within the SPA that would be affected by the project, though given red-throated diver are likely to be present beyond the original boundary, albeit in lower densities, there is merit in presenting displacement values that include as well as exclude those parts of the SPA that fall beyond the original boundary.</p> <p>Recommendation:</p> <p>Calculate the area of effect within the SPA based on the overall area subject to displacement effects, rather than reducing the area proportionally according to the level of displacement of red-throated diver expected to occur.</p> <p>Present displacement values that both include and exclude those parts of the SPA that fall beyond the original boundary.</p> <p>Natural England also advise that the area of the SPA subject to displacement for red-throated diver is considered in-combination with other plans and projects.</p>	<p>The Applicant does not agree that application of the displacement gradient to the effective area of displacement was without merit. It has been established that the displacement effect would diminish as distance from the windfarm increases, and therefore it was logical to conclude that the effective area would also be reduced. It has been acknowledged that the application of the Natural England gradient was a proxy, but it should be noted that the total (uncorrected) values have also been presented for comparison.</p> <p>Displacement values for both the original and updated SPA boundary have been presented in the RIAA (Document Reference 4.9).</p>
MOR_028_146_020 623	<p>The in-combination assessment suggests a 60% increase in baseline mortality for non-breeding lesser black-backed gull at Morecambe Bay and Duddon Estuary SPA yet concludes that an adverse effect is unlikely.</p> <p>NE accepts that the mortality estimate is likely to be precautionary, and the apportioning of impacts may be problematic. However, we highlight the obvious need for thorough investigation into this impact, including through PVA.</p> <p>Tracking studies are used to evidence that the apportioning undertaken is not appropriate for the consideration of impacts. Natural England consider this suggests an alternative approach to apportioning should be investigated.</p> <p>Recommendation:</p>	<p>Project-alone and in-combination assessments in the RIAA have been updated with the full 24 months of baseline survey data. In respect of lesser black-backed gull, it was concluded that there would be no meaningful mortality contribution from the Project, and therefore no in-combination assessment was required. However, in-combination estimates (including PVA) have been presented as context to the assessment, but without prejudice to the conclusion of no adverse effect on integrity. PVA (EIA) has been undertaken for great black-backed gull cumulative collision risk; refer to Section 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Revisit the project alone and in-combination assessments to account for the complete baseline survey data and any updates to cumulative and in-combination totals.</p> <p>Undertake PVA modelling to investigate increases in baseline mortality of >1%.</p> <p>Investigate the possibility of utilising tracking data and other relevant evidence to generate defensible apportioning of lesser-black backed gull impacts to SPAs.</p> <p>Natural England reiterate our advice to follow the mitigation hierarchy and reduce the potential impacts of the project by increasing the minimum rotor clearance above LAT.</p>	
MOR_028_147_020 623	<p>Awel-Y-Mor is not considered in-combination as impacts would not lead to a detectable increase in lesser-black backed gull mortality of the SPA population. Natural England advise that all impacts should be scoped into the in-combination assessment. I.e. impacts that do not result in >1% increases of baseline mortality should still be considered.</p> <p>Recommendation: Natural England advise that all contributory impacts must be considered in-combination in the submitted ES. Project alone impacts considered to be negligible should not be scoped out.</p>	<p>The RIAA has concluded that there would be no meaningful lesser black-backed gull mortality contribution from the Project, and therefore no in-combination assessment was required. However, in-combination estimates (including PVA) have been presented as context to the assessment, but without prejudice to the conclusion of no adverse effect on integrity. The in-combination estimates include all relevant projects, including Awel y Môr.</p>
MOR_028_148_020 623	<p>NE does not agree that the results of the tracking study carried out by Clewley et al. (2020) comprise sufficient evidence to conclude that the birds identified in the study area are unlikely to originate from the Morecambe Bay and Duddon Estuary SPA, and therefore dismiss potential significant impacts.</p> <p>The study covered the period from 2016-2019 so there is no overlap with the aerial surveys carried out for the project. During that time connectivity with existing wind farms was found for >50% of the birds from the South Walney colony surveyed.</p> <p>The authors of the study noted that lesser black-backed gulls are more likely to forage offshore when rearing chicks. The study coincided with a period of very poor productivity at the South Walney colony. Productivity has since improved; hence more offshore foraging may be occurring.</p> <p>Note there is also an error in the text whereby Clewley et al. (2021) is cited rather than Clewley et al. (2020).</p> <p>Recommendation: The submitted ES should acknowledge the high likelihood that adult lesser black-backed gulls recorded in the project study area during the breeding season will be from nearby SPA colonies.</p>	<p>The assessment presented in the RIAA includes data that assumed birds were apportioned to Morecambe and Duddon Bay Estuary SPA. However, it is noted that the Clewley (2020) data did indicate that this may result in an overestimate of the effects on this feature.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_028_149_020 623	<p>Hodbarrow is to the Northeast of the windfarm site. Therefore, it is entirely possible that breeding Sandwich terns from the Morecambe Bay and Duddon Estuary SPA pass through the windfarm site on migration to reach known post-breeding roost sites on the North Wales coast via a relatively direct route.</p> <p>Recommendation: The submitted ES should assess the project alone and in-combination impacts on Sandwich tern.</p>	<p>The assessment of effects on Sandwich tern from Morecambe Bay and Duddon Estuary SPA (both Project-alone and in-combination) is presented in the RIAA.</p>
MOR_028_150_020 623	<p>Whilst Natural England is unable to provide detailed comment on SLVIA at the PEIR stage due to resource limitations, we welcome the adoption of a 60km study area for the SLVIA. Noting that several English landscape designations are within the 60km buffer, Natural England welcomes further engagement on the SLVIA through ETGs prior to the submission of the ES.</p> <p>Consenting Risks – Separate DCO Submissions for Generation and Transmission Assets. Please refer to the paper provided along with our EIA scoping response on 21st July 2022 (our ref: 18251/ 399738) which highlights the implications and risks associated with stranded assets during the consenting process. For detailed advice please refer to the associated annexes. Please see below for Appendix 1. If you have any queries relating to the content of this letter, please contact me using the details provided below.</p>	<p>The Applicant notes your response.</p> <p>Chapter 18 Seascape, Landscape and Visual Impact Assessment (Document Reference 5.1.18) includes a 60km study area with results of the assessment shared at ETGs.</p> <p>Concerns over consenting risks have been discussed with Natural England and other stakeholders. In each ES technical chapter, a separate assessment considering both Generation Assets (the Project) and the Transmission Assets is undertaken in the cumulative section, before consideration of all plans and projects.</p> <p>In addition, a separate ES chapter (Chapter 23 Summary: Generation and Transmission Assets Assessment (Document Reference 5.1.23)) that consolidates and summarises into one Document the impacts of the Project (Generation Assets) and the Transmission Assets as a whole is also provided as part of the DCO application for information, including consideration of all potential impact pathways. See Section 6.7.4 of Chapter 6 EIA Methodology (Document Reference 5.1.6) for more information.</p>
MOR_029_001_020 623	<p>Thank you for consulting the RSPB over the proposal to construct Morecambe Offshore Wind Farm (the Application). We are grateful for the opportunity to comment on the offshore ornithology aspects of the proposed offshore wind farm, as set out in the PEIR Documents. Due to the parallel nature of the three PEIR consultations (Morecambe, Morgan and Mona) and resource constraints, we have not been able to review the Documents provided to provide meaningful comments at this stage. We will instead provide our input on offshore ornithology matters via the expert working group in the evidence plan process.</p>	<p>The Applicant acknowledges the RSPB's contributions during the ETG meetings and agrees that Manx shearwater, gannet, kittiwake, guillemot, razorbill, red-throated diver and common scoter were among the key species for the assessment (other gulls have also been considered in the assessment of construction collision risk).</p>
MOR_029_002_020 623	<p>However, we wish to confirm that the main breeding seabird species of interest to the RSPB includes Manx Shearwater (<i>Puffinus puffinus</i>), Northern Gannet (<i>Morus bassanus</i>), Black-legged Kittiwake (<i>Rissa tridactyla</i>), Common Guillemot (<i>Uria aalge</i>) and Razorbill (<i>Alca torda</i>) along with non-breeding Red-throated Diver (<i>Gavia stellata</i>) and Common Scoter (<i>Melanitta nigra</i>). We also have concerns with breeding Lesser Black-backed Gull (<i>Larus fuscus</i>), despite the low</p>	<p>The Applicant acknowledges the RSPB's contributions during the ETG meetings and agrees that Manx shearwater, gannet, kittiwake, guillemot, razorbill, red-throated diver and common scoter were among the key species for the assessment (other gulls have also been considered in the assessment of construction collision risk (see Chapter 12 Offshore Ornithology (Document Reference 5.1.12)). Impact on SPA lesser black-backed gull colonies have been fully considered in the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9). Bowland Fells SPA lesser black-</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>frequency of occurrence during the reported survey work. This is because, with the exception of the Ribble and Alt Estuary SPA colony, the main Irish Sea breeding colonies (at Bowland Fells SPA and Morecambe Bay and Duddon Estuary SPA) require restoration to a favourable conservation status and the implications of this needs careful consideration via the Expert Working Groups. Additionally, we are surprised that the Bowland Fells SPA, Large gull super colony was not mentioned within your Documents as a recent paper published by the RSPB and Natural England as part of the Life on The Edge (LOTE) project stated that the 'Bowland Fells may be the largest lesser black-backed gull colony in the world", as previously mentioned, and despite its apparent size, the colony is still considered in recovery from the impact of decades of licenced culling.</p>	<p>backed gull have been screened into the assessment, however, lack of breeding season connectivity with offshore areas has been noted, and this has been Referenced in the RIAA.</p>
<p>MOR_030_001_020 623</p>	<p>Introduction In response to the consultation on the Preliminary Environmental Information Report pertaining to the Morecambe Offshore Windfarm Generation Assets, Chrysaor Resources (Irish Sea) limited ("Harbour Energy") have set out the below areas that should be given consideration when designing the layout of the proposed wind farm. It is Harbour Energy's stance that the Morecambe Offshore Windfarm and Harbour's existing Calder platform can coexist, and Harbour Energy are committed to continue working with the Morecambe project team to share information to assist with the planning and development process. Background Calder is a natural gas field located approximately 40 km offshore Blackpool in the East Irish Sea. It is owned 100% by Chrysaor Resources, Irish Sea (Harbour Energy). The Calder facilities, which are all operated by Spirit Energy on behalf of Harbour Energy, comprise of a normally unmanned platform (Figure 1) which exports the sour gas via a dedicated export line to the Rivers Terminal at Barrow. The Calder platform is powered via a subsea cable from the South Morecambe CPP1 platform which is owned and operated by Spirit Energy. Figure 1: Calder Platform Calder is routinely accessed by campaign and maintenance teams for manned operations by helicopter. Access to the platform is working day only as there are no planned overnight facilities available on-board Calder. Helicopter access is therefore required for planned work campaigns and may also be required in response to controlled evacuation scenarios when there are personnel onboard.</p>	<p>The Applicant notes your response.</p> <p>Oil and gas assets have been assessed as part of shipping and navigation and aviation assessments as well as access studies. Further information on our assessments can be found Chapter 14 Shipping and Navigation (Document Reference 5.1.14), Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16) and Chapter 17 Infrastructure and Other Users (Documents Reference 5.1.17) of the Environmental Statement and supporting appendices.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_030_002_020 623	For periods when the platform is manned, access is required by Emergency Response and Recovery Vessel (ERRV) to demonstrate compliance to Offshore Installations (Prevention of Fire and Explosion, and Emergency Response) Regulations 1995 (PFEER), in particular Regulation 17. At all times, the ERRV is also used as means to monitor errant vessel collision risk in line with PFEER Regulations 10 (a) and (b) and 19 (a) and (b), OTO1992 052 Effective Collision Risk Management for Offshore Installations and OGUK Guidelines for Ship / Installation Collision Avoidance. Calder will also be serviced by a Platform Supply vessel providing fuel and logistical support as required while the platform is manned.	The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform. Buffer zones around existing infrastructure (where WTGs and OSPs would not be located) are identified and assessed within the ES. Please refer to Chapter 14 (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information Engagement is ongoing with Harbour Energy on the terms of a suitable cooperation and coexistence agreement.
MOR_030_003_020 623	Once Calder has ceased production, decommissioning will commence with well abandonment from a rig located adjacent to the Calder platform. Whilst the rig is at the Calder platform, works performed will include the flushing of the trunklines and topsides, and the installation of Navigation aids such that the platform is rendered cold and ready for removal once the rig departs. Platform removal will be undertaken by a heavy lift vessel within four years of the completion of the rig work scope. After platform removal, the seabed will be cleared of snag hazards and debris. Decommissioning works will require vessel and aviation access during the operations.	The Applicant notes your response. The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform. Buffer zones around existing infrastructure (where WTGs and OSPs would not be located) are identified and assessed within the ES. Please refer to Chapter 14 (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information Engagement is ongoing with Harbour Energy on the terms of a suitable cooperation and coexistence agreement.
MOR_030_004_020 623	General PEIR Feedback Harbour Energy responds to the PEIR consultation in the spirit of cooperation and recognises the need for coexistence. The feedback provided below outlines the access zones required to maintain availability to the platform and subsea facilities. Shipping and navigation distances are provided below for completeness; however, helicopter access to the Calder platform and a future decommissioning rig defines the access zone requirements.	The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform Buffer zones around existing infrastructure (including a 1.5nm separation radius between platforms and WTGs/ OSPs) are identified and assessed within the ES. Please refer to Chapter 14 (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) and Appendix 17.1 Helicopter Access Study (Document Reference 5.2.17.1) for further information. Engagement is ongoing with Harbour Energy on the terms of a suitable cooperation and coexistence agreement.
MOR_030_005_020 623	Harbour Energy has consulted with an independent aviation specialist to establish the minimum requirements for aviation operations within a windfarm; however, at the end of 2022, a working group was formed comprising of the CAA and all the North Sea helicopter operating companies. The aviation distances provided below are subject to change pending the CAA's revised CAP 764 Policy and Guidance or the CAA's Specific Approval for Helicopter Offshore Operations (SPA HOFO).	The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform. Buffer zones around existing infrastructure (including a 1.5nm separation radius between platforms and WTGs/ OSPs) are identified and assessed within the ES. Please refer to Chapter 14 (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) and Appendix 17.1 Helicopter Access Study (Document Reference 5.2.17.1) for further information. The Helicopter Access Study undertaken by the Applicant considered the proposed change to CAP 764 guidance. Engagement is ongoing with Harbour Energy on the terms of a suitable cooperation and coexistence agreement.
MOR_030_006_020 623	Harbour Energy has also been an active participant in the NASH Maritime shipping and navigation discussions to date; however, we	The Marine Navigation Engagement Forum (MNEF) has continued throughout the pre application process with Harbour Energy as a participant. As part of the embedded

Unique Reference Identifier	Consultation response received	Applicant response
	<p>recognise that given the complexity of the cumulative impact on maritime and shipping activities in the area further definition on the impact to Harbour Energy operations is required.</p>	<p>mitigation, the Marine Navigation Engagement Forum (MNEF) would be continued to facilitate information sharing and identification of additional risk controls.</p> <p>Further information is presented in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and supporting appendices (Document References 5.2.14.1 and 5.2.14.2).</p>
<p>MOR_030_007_020 623</p>	<p>Feedback Form – 1.11 Infrastructure and Other Users PEIR Ref Table 17.2 Realistic worst-case scenarios for infrastructure and other users, Table 17.3 Embedded mitigation measures, Section 17.50 To maintain access to the Calder platform to support operational activities and future decommissioning activities, the Calder platform requires an aviation access sector free from any wind turbine generators (including rotors) comprising of: 1. A radius of 6.1km (3.3nm) around the Calder platform; and 2. A 3.7km (2nm) wide corridor oriented into the prevailing wind and extending from the centre of the platform to a distance of 13.0km (7nm). Within the PEIR there are numerous References to a 1.5nm helicopter traffic zone. However, any windfarm layout that has wind turbine generators within 6.1km (3.3nm) of the Calder platform would result in a significant reduction in flight availability and would create a restriction on operational activities by way of impeding our emergency response capabilities. Harbour Energy intends to discuss this matter further with the Morecambe Wind Farm project team in the spirit of developing solutions for co-existence.</p>	<p>The Applicant has been in regular engagement with Harbour Energy throughout the development of the Project, to date.</p> <p>The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform. Buffer zones around existing infrastructure (including a 1.5nm separation radius between platforms and WTGs/ OSPs) are identified and assessed within the ES. Please refer to Chapter 14 (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) and Appendix 17.1 Helicopter Access Study (Document Reference 5.2.17.1) for further information.</p> <p>The Helicopter Access Study (Document Reference 5.2.17.1) shows that future access to some oil and gas platforms would be impacted by the presence of wind turbine generators (WTGs). Whilst this would be a logistical impact on the operator, Search and Rescue (SAR) access would remain unaffected.</p> <p>The Applicant is continuing to engage with Harbour Energy on terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness (as further discussed in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) and in Chapter 16 Civil and Military Aviation and Radar (Document Reference 5.1.16)).</p> <p>An Emergency Response and Cooperation Plan (ERCoP) would be drafted post-consent, and lines of communication has been established with other operators in the region including Harbour Energy.</p>
<p>MOR_030_008_020 623</p>	<p>Feedback Form – 1.8 Shipping and Navigation PEIR Ref Section 14.6.5 Oil and gas vessels. The Calder platform will require marine access corridors free from temporary or permanent surface infrastructure (except as may from time to time be approved by the Calder Operator) as follows: 1. a radius of 1.8km (1nm) around the Calder platform; 2. a 1.8km (1nm) corridor between the Calder and CPP1 platforms; and 3. 500m each side of the Calder pipelines and subsea cables. The marine corridors list above are to ensure the safe passage and manoeuvring of vessels supporting both the operation and future decommissioning activities of the platform and associated subsea facilities.</p>	<p>The Project windfarm site boundary has been further refined since statutory consultation and no longer overlaps with the Calder (CA1) platform. Buffer zones around existing infrastructure (including a 1.5nm separation radius between platforms and WTGs/ OSPs) are identified and assessed within the ES. Please refer to Chapter 14 (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information.</p> <p>Engagement is ongoing with Harbour Energy on the terms of a suitable cooperation and coexistence agreement.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_030_009_020 623	Harbour Energy has a legal duty to safely maximise the economic recovery of fossil fuels from its licenses in the UK and thereafter carry out decommissioning obligations. Harbour Energy is committed to working in a manner that promotes the coexistence of it offshore oil & gas operations with those of the offshore renewables industry and will therefore engage with the Morecambe Offshore Windfarm project team to progress options to reach a cooperative solution.	The Applicant notes your response. Engagement is ongoing with Harbour Energy on the terms of a suitable cooperation and coexistence agreement.
MOR_031_001_020 623	<p>Morecambe Bay Generation Assets PEIR Consultation: Detailed analysis of PEIR with specific comments from respective Departments: (Highlighted sections identify particular areas of text which have been considered further). Should you require any further clarification on any of these sections, please do not hesitate to contact us. Chapter 10 Fish and Shellfish Ecology MMO 3.4.1 – The report appears to separate spawning and nursery grounds, but doesn't acknowledge transboundary effects. There is limited purpose in protecting spawning only to kill them during the nursery phase, or vice versa. While the species may be assessed at the population level, are they assessed at lifecycle level? (eg. section 10.52 – distributions of fish and shellfish is independent of national boundaries – as are their lifecycle stages))</p> <p>Other work has indicated connectivities between life cycle stages, spawning grounds and nursery grounds, or fishing grounds – thereby requiring a linked assessment, ie, can't consider the life stages in isolation, and so the assessment must look at each stage and consider where the highest risk arises. For example, Neil et al 2008 (http://sustainable-fisheries-iom.bangor.ac.uk/Documents/government-reports/scallop/2008/BangorFisheriesReport_No3.pdf) showed connectivity between south and north areas within the eastern Irish sea-spawning connections with nursery areas. How has connectivity across the area, with respect to life cycle stages and impacts been assessed?</p>	<p>Spawning and nursing grounds, including underwater noise modelling, has been assessed. This is presented in Chapter 10 Fish and Shellfish (Document Reference 5.1.10). Potential effects on migratory fish, including transboundary effects, has been assessed and presented in the Report to Inform Appropriate Assessments (Document Reference 4.9), where appropriate.</p> <p>Fish spawning and nursery grounds in the Isle of Man have been considered within Chapter 10 Fish and Shellfish and no significant effects were identified.</p>
MOR_031_002_020 623	As per MMO advice (pg. 19 Table – MMO ref – 3.4.18) - recommends contacting AFBI - has this been done? It indicates that the data obtained, but given their expertise, has the project and conclusions been discussed with them? There are only 6 References to AFBI, and none specific to expert advice.	The MMO recommended that the AFBI be contacted to discuss use of their NIHLS data, to better inform the baseline for herring spawning. AFBI have been contacted to discuss the use of NIHLS data. AFBI provided the previous 10 years of data, which have been used to generate a herring larvae heatmap (Figure 10.6 (Document Reference 5.3.10)) to provide present-day context to the extent of the Isle of Man herring spawning ground, as discussed and agreed with ETG members.
MOR_031_003_020 623	Pg . 55 - 10.55 – notes that no transboundary effects expected for noise affecting IoM waters, which is the approach adopted for other developments. However, none of them are in the vicinity and they are older projects. How does that rationale enable progression of data and improved understanding of impacts?	Following statutory consultation and publication of the PEIR, the windfarm site boundary has been refined eastwards (increasing the distance from the Project to Isle of Man). The windfarm site has been refined since PEIR and worst-case impact ranges (and therefore Zol for the Project) can be more confidently applied, allowing for a Project-specific rationale for the assessment of transboundary effects to be set out (Section 10.8 in Chapter 10 Fish and Shellfish Ecology) (Document Reference 5.1.10)).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_031_004_020 623	10.4.2.2 Do you need to include, or acknowledge the relevant Isle of Man policy and legislation given the acknowledgement of potential transboundary effects on species which are protected/managed in Manx waters, including the existence of designated conservation areas? (see also comment on MCZ Assessment Report).	The transboundary effects on Manx protected species is presented in the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9).
MOR_031_005_020 623	Pg.48 Table 10.5: noting that Manx Basking Shark Watch has now transferred its public sightings database responsibilities to the Manx Whale and Dolphin watch: https://www.mwdw.net/ https://www.mwdw.net/history-of-manx-basking-shark-watch/ And also that the Isle of Man has its own NBN Atlas website: https://isleofman.nbnatlas.org/ . This should be linked to the main NBN Atlas, and therefore should be the same, however, it may be worth checking, and noting.	The Applicant notes your response. The Isle of Man NBN atlas is consistent with the main NBN atlas with regard to basking shark at the time of writing.
MOR_031_006_020 623	10.37, as noted above - spawning and nursery grounds are both assessed; are they considered linked or separately? Could this make a difference in the eventual impact on the species, either in the short or long term?	If significant effects are found on either spawning or nursery grounds (or any aspect of any receptor), then population level effects may occur for the receptor, which includes the ability of the population to survive and reproduce into the future, with life cycle effects included in this. Any impact is considered in terms of its effect at the population level.
MOR_031_007_020 623	10.54 sound effect on herring (spawning aggregations) up to 47 km away, but what effect does it have on larvae or eggs already spawned? The assessment seem to consider only the adults as the receptors, but the impact may be on the eggs and larvae.	The MMO recommend modelling for the peak sound pressure level (SPL _{peak}) of 207dB for eggs and larvae following a worst-case scenario. This modelling has been undertaken and impact ranges are reported in Table 10.26 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). The modelling suggests that, within the worst-case instantaneous noise impact range of 320m around the monopile during maximum hammer energy (6,600kJ) piling, pelagic larvae and eggs may be subject to mortality. This impact range is not assessed as sufficient to cause significant effects on fish populations within the region.
MOR_031_008_020 623	10.55, it is not clear how examples from the North sea are relevant as to whether or not transboundary effects in relation to the IOM should be included. Surely the regional circumstances of each windfarm determines this, not how previous developments have treated it? That is, these examples are not valid justifications for specific assessment, or otherwise, of transboundary effects for Morecambe proposal and the Isle of Man. The decision should be based upon consideration of evidence, assessment and consultation.	North Sea examples are used as a precedent for EIA methodology and rationale around transboundary effects under the English system that this EIA must ultimately be determined under and competent authorities may wish to adopt a consistent approach in their determinations, despite regional differences. It is acknowledged, however, that the biogeographic regions are not comparable and that different stakeholders are of relevance for the Project compared to North Sea projects. The windfarm site has been refined since PEIR and worst-case impact ranges (and therefore Zol for the Project) can be more confidently applied, allowing for a Project-specific rationale for transboundary effects to be set out (Section 10.8 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10)).
MOR_031_009_020 623	10.63 and 10.68 It's not clear why herring nursery grounds are not mentioned in relation to the array site – Figure 10.3c clearly shown the site covers an area of high intensity herring nursery ground. There is acknowledgement of the spawning grounds further away in Manx waters, but the connectivity between the two areas appears not to be	The MMO recommend modelling for the peak sound pressure level (SPL _{peak}) of 207dB for eggs and larvae following a worst-case scenario. This modelling has been undertaken and impact ranges are reported in Table 10.26 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). The modelling suggests that, within the worst-case instantaneous noise impact range of 320m around the monopile during

Unique Reference Identifier	Consultation response received	Applicant response
	<p>acknowledged in the assessment. It appears that the emphasis is on the distance away from the site for spawning, but no recognition of the site being on a nursery ground.</p> <p>Can't consider the noise impact on spawning aggregations and spawning in Manx waters, without making the same assessment of the larvae when they hatch and drift to the NE and SE towards the array area. There's little point in protecting one part of the life cycle somewhere, but kill them later at a different life cycle stage.</p> <p>As above, noting that Table 10.2 acknowledges the nursery ground on site, but not necessarily the connectivity?</p>	<p>maximum hammer energy (6,600kJ) piling, pelagic larvae and eggs may be subject to mortality. This impact range is not assessed as sufficient to cause significant effects on fish populations within the region.</p>
MOR_031_010_020 623	<p>10.5.4</p> <p>Again, there is no sense of connectivity between the spawning and nursery grounds for herring in this section. There is Reference to the larval distribution, and also acknowledgement of the array site being a high intensity nursery ground- so what's the connection between larval distribution and the nursery ground – they must originate as larvae and end up on the nursery ground. It feel like there is a disconnect.</p> <p>Suggest specific consultation with AFBI in relation to the interaction of herring spawning and nursery grounds in the eastern Irish Sea, and the validity of the conclusions drawn.</p>	<p>Herring spawning habitat heatmapping, using AFBI NINEL herring larvae survey data from the previous 10 years has been undertaken and is presented in Section 10.5.4 of Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). The heatmap is overlaid with precautionary 135dB SELSS noise contours in Figure 10.6. This shows that there is no direct overlap in the worst-case temporary behavioural impact range derived from Hawkins et al., (2014) with either the historical or likely present day spawning ground at the Isle of Man. However, an assessment on herring spawning is made noting the proximity and limitations of the definition of spawning ground in Section 10.6.2.4 in Chapter 10 Fish and Shellfish Ecology.</p>
MOR_031_011_020 623	<p>10.64 and 10.86 Basking shark are also protected under the Wildlife Act 1990 of the Isle of Man. The Isle of Man is also signatory to both CITES and the Bern Convention.</p>	<p>The Applicant notes your response. The Isle of Man Wildlife Act 1990 has been added to Section 10.5.7 in Chapter 10 Fish and Shellfish Ecology.</p>
MOR_031_012_020 623	<p>Table 10.11 does anyone actually fish Nucella lapillus? It's predominantly a littoral species.</p> <p>Also, should be Homarus gammarus</p>	<p>The Applicant notes your response. Erroneous inclusion of Nucella lapillus in Table 10.11 (in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10)) removed. Instances of incorrect spelling of Homarus gammarus are also resolved.</p>
MOR_031_013_020 623	<p>10.5.10 Does not appear to include the Isle of Man designated sites, under the Wildlife Act 1990.</p> <p>Several have relevant designation features to this chapter. See: https://www.gov.im/media/1378920/designation-of-marine-nature-reserves-guidance-note.pdf</p>	<p>The Applicant notes your response. IoM designations are noted within Section 10.8 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10), as well as relevant species covered in the assessments in Sections 10.6 and 10.7 in Chapter 10 Fish and Shellfish Ecology.</p>
MOR_031_014_020 623	<p>Table 10.17</p> <p>Please clarify why herring spawning (and larval distributions – as shown on Plate 10.1) – would not be considered as a receptor when they have a specific sensitivity to underwater noise, and sound levels would extend to those areas?</p> <p>10.121 Herring as a high sensitivity species, and with a high intensity nursery ground on the array site does not seem to justify a negligible impact. Sound energy from the construction phase on a high intensity nursery ground would presumably have a potentially significant impact on the animals on site, and for some distance around – so it's not potentially short term or reversible for the cohort affected by the noise, which has the potential to affect a considerable area of the high</p>	<p>To clarify, herring spawning and nursery grounds are considered as receptors in and of themselves. They are characterised in Sections 10.5.3 and 10.5.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10) and considered in all assessments in Section 10.6 and 10.7. The omission of herring spawning and nursery grounds from Table 10.17 in Chapter 10 Fish and Shellfish Ecology has now been amended to include these receptors.</p> <p>To clarify, paragraph 10.121 in Section 10.6.2.1 in Chapter 10 Fish and Shellfish Ecology is in relation to the impact of temporary physical disturbance to the seabed within the windfarm site, rather than underwater noise impacts. Temporary physical disturbance is quantified in Section 10.3.2 of Chapter 10 Fish and Shellfish Ecology. The negligible assessment of magnitude still stands in relation to herring larvae. AFBI</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>intensity nursery ground. Has the effect been modelled or is just assumed to be negligible? If not actually estimated, should it not be taken forward for further assessment and specific monitoring in case the data-limited assumption is incorrect? Has AFBI concurred with this conclusion?</p>	<p>have not given feedback on this conclusion, but the Applicant considers this clarification on the impact considered in Section 10.6.2.1 in Chapter 10 Fish and Shellfish Ecology provides the necessary context as to the assessment conclusion.</p>
<p>MOR_031_015_020 623</p>	<p>10.204-10.211 Given the amount of uncertainty associated with this receptor, why not undertake some empirical monitoring, rather than assuming effects and excluding from EIA? Negligible/minor adverse and no monitoring – how will the assumptions be verified?</p>	<p>The Applicant is proposing to undertake monitoring of publicly available commercial fisheries data. Further, noise monitoring of the first four piles, whilst primarily a monitoring measure for marine mammals, would also determine that the maximum underwater noise levels as assessed within the ES for fish are not being breached. The Applicant would remain in dialogue with stakeholders, including nearby projects, to discuss any regional or strategic projects that may be in planning and that may assist in verifying EIA conclusions.</p>
<p>MOR_031_016_020 623</p>	<p>Table 10.38 and 10.362 Has Ørsted Isle of Man offshore windfarm been considered? Conclusion at this section noted and agreed.</p>	<p>The Isle of Man offshore windfarm (Moor Vannin) has been considered in the cumulative impact assessment screening (Table 10.38 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10)), using the latest publicly available information. At this stage, no underwater noise modelling has been undertaken (with the published Moor Vannin scoping report (Ørsted, 2023) using nearby modelling at the Morgan Offshore Wind Project to define a 50km study area), and timescales (as they are currently planned for Moor Vannin and the Project) would mean offshore construction would not overlap. Assessments based on this information are provided in Section 10.7 in Chapter 10 Fish and Shellfish Ecology.</p>
<p>MOR_031_017_020 623</p>	<p>10.11 Potential Monitoring Requirements Negligible/minor adverse and no monitoring – how will the assumptions and conclusion be verified? How does this development contribute to the increase in evidence and information in this particular regional and specific set of circumstances</p>	<p>The Applicant is proposing to undertake monitoring of publicly available commercial fisheries data. Further, noise monitoring of the first four piles, whilst primarily a monitoring measure for marine mammals, would also determine that the maximum underwater noise levels as assessed within the ES for fish are not being breached. The Applicant would remain in dialogue with stakeholders, including nearby projects to discuss any regional or strategic projects that may be in planning that may assist in verifying EIA conclusions.</p>
<p>MOR_031_018_020 623</p>	<p>Chapter 11 Marine Mammals Appendix 11.2 Marine Mammal Information and survey data Comments made here may also apply to PEIR. 1.2.Policy Legislation and Guidance As a signatory to the CBD, the Isle of Man’s Biodiversity Strategy outlines its commitments to species and habitats: https://www.gov.im/media/1346374/biodiversity-strategy-2015-final-version.pdf Table 1.2 ASCOBANS (and the Bonn Convention) has also been extended to the Isle of Man (via the UK), ie. IoM is also a signatory. Similarly IoM is signatory to the Bern and Bonn Conventions, OSPAR, CITES and CBD – all extended via the UK. (It should be Bern Convention rather than Berne, which relates to authorship rights). For full details of IoM participation in multilateral conventions and treaties see: Appendix B, pg. 44 of the Isle of Man Biodiversity Strategy: https://www.gov.im/media/1346374/biodiversity-strategy-2015-final-version.pdf</p>	<p>Corrections have been addressed and that the IoM was a signatory to a range of national and international legislation has now been outlined in the Section 2 of Appendix 11.2 (Document Reference 5.2.11.2).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_031_019_020 623	<p>Table 1.2 The IoM Wildlife Act 1990 also establishes the legal protection of Marine Nature Reserves (under Sections 32 and 33), as well as NNRs and ASSIs.</p> <p>1.2.4. European Protected Species guidance Noting this relates to EPS. The Isle of Man, as a non/never-EU member state, but with its own relevant legislation (as outlined in Table 1.2), it is requested that the equivalent description of legislative scope for marine mammals is indicated for IoM, if only to indicate that equivalent protection for these species extends across the Irish Sea region, and therefore equivalent consideration in respective territorial waters is justified. Fr example see Table 11.5 NPS assessment requirements (PEIR) - marine mammals are legally protected species in Manx waters and must therefore be indicated and considered as equivalent under UK legislation. This could easily be included under 1.2.6. 1.2.5 Applicable to the IoM 1.31 – there are ten marine nature reserves. See: https://www.gov.im/mnr.</p>	<p>Corrections have been addressed and that the IoM was a signatory to a range of national and international legislation has now been outlined in the Section 2 of Appendix 11.2 (Document Reference 5.2.11.2).</p> <p>Updates have been made to Section 2.4 of Appendix 11.2.</p> <p>The 10 Marine Nature Reserves (MNRs) have been further described in Appendix 11.2 in Section 2.6 and in Table 2.2 Table 2.2 and their Marine Mammal Designation Features.</p>
MOR_031_020_020 623	<p>For the designation features of each, including marine mammals see: https://www.gov.im/media/1378920/designation-of-marine-nature-reserves-guidance-note.pdf 1.55 See also Manx Marine Environmental Assessment: https://www.gov.im/about-the-government/departments/infrastructure/harbours-information/territorial-seas/manx-marine-environmental-assessment/ And chapter 3.4 a, b : https://www.gov.im/media/1363399/ch-34a-cetaceans.pdf https://www.gov.im/media/1363400/ch-34b-seals.pdf</p> <p>1.87 Is 2018 the most recent data available? Suggest contact MWDW for updates. 1.47 Grey seals. There is limited Reference to grey seals in Manx waters, where a regionally important population is found. Details, including annual survey data can be found here, https://www.gov.im/media/1363400/ch-34b-seals.pdf https://www.mwt.im/terrestrial/calf-man-bird-observatory - Calf Seal Survey and by contacting the Manx Wildlife Trust directly. Table 1.7 the Manx population estimate of grey seals is thought to be around 400 animals. COMMENTS ON PEIR</p>	<p>The 10 Marine Nature Reserves (MNRs) have been further described in Appendix 11.2 (Document Reference 5.2.11.2) in Section 2.6 and in Table 2.2 and their Marine Mammal Designation Features.</p> <p>The Manx Marine Environmental Assessment Documents have been referred to as Howe, 2018 and 2018a.</p> <p>The availability of marine mammal sighting and effort data from Manx Whale and Dolphin Watch (MWDW) has been discussed. With the recent publication of Evans and Waggitt (2023), into which data from MWDW has been incorporated, this would not provide any further insight about the overall presence of species in the Irish Sea. Evans and Waggitt (2023) has been discussed for each species within their respective section under Section 5 of Appendix 11.2.</p> <p>Updates have been made in Section 5.7.1 and 5.7.2 of Appendix 11.2.</p> <p>The grey seal population for the IoM has been updated to 400 and applied to relevant Documents.</p>
MOR_031_021_020 623	<p>Table 11.2 Realistic Worst case scenario Table: Impact 9 - Impact sites for grey seals should include Isle of Man. See: https://www.mwt.im/sites/default/files/2023-03/Calf%20Seal%20Report%202021.pdf https://www.mwt.im/terrestrial/calf-man-bird-observatory for other year reports. Noting that Table 11.5 NPS assessment requirements indicates inclusion of 'known birthing/haul out areas, nursery grounds..' etc. – which therefore should include IoM sites, unless there is a distance</p>	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection will be made post consent.</p> <p>Further information has been added in Chapter 11 Marine Mammals, Table 11.5 and Section 5.7.2 of Appendix 11.2 (Document Reference 5.2.11.2).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	limitation? Currently only appears to include Dee estuary and South Walney?	
MOR_031_022_020 623	Table 11.8 – no Manx data sources included? There appear to be References to several. 11.4.5 Transboundary Effects. As noted, when considering TB effects an equivalence to European Sites and European Protected Species must be made to account for other jurisdictional legislation and classifications – e.g. Isle of Man , which has no European sites, but does have equivalent protected sites and species protected status.	Chapter 11 Marine Mammals (Document Reference 5.1.11), Table 11.8 has been updated with Relevant Manx data sources. Protected sites for the IoM have been addressed in Chapter 11 Marine Mammals Section 11.5.10 and assessed in Chapter 11 Marine Mammals, Section 11.8.1.
MOR_031_023_020 623	11.72 – states there is a ‘good understanding of the existing environment.’ Yet, 11.5.4 (Risso’s dolphin) does not mention the Manx ‘population’ in the areas regularly sighted, despite being the closest to the proposed site. It is difficult to understand how basic oversights such as this can be made, especially since in the Baseline information chapter, for example Pg. 54 (1.106), it states, ‘Risso’s dolphin are the most commonly seen dolphin species in Manx territorial waters....’	Additional information has been added to Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.5.4.
MOR_031_024_020 623	11.5.6 11.115 only refers to the UK waters presence of Minke and the Celtic and Western Irish Sea – however, 1.118 of the baseline information chapter discussed the Manx minke ‘population’. Why is there no Reference in the PEIR to minke in the eastern Irish Sea or around the Isle of Man? Was the baseline information chapter referred to in writing both of these examples (Risso’s and minke)?	Additional information has been added to Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.5.6. To note, the CGNS MU includes the IoM and Republic of Ireland, thus baseline information regarding those areas was covered as part of assessments.
MOR_031_025_020 623	11.124 There is no mention of the Isle of Man grey seal haul-out and pupping area at the Calf of Man in this section, and yet the Manx population is referred to in general terms in section 11.129. 11.398 (and 11.5.7) There is no mention of the Isle of Man grey seal haul-out and pupping area at the Calf of Man in this section, and yet the Manx population is referred to in general terms in section 11.129. See also earlier comments about the omission of Manx grey seal population (which is estimated to number around 400 individuals). 11.130 – the IoM resident population is referred to as 50, but this has since been updated to 400. Contact MWT for further details. See also 11.668 where estimated total populations may be underestimated as a result.	Further information regarding the IoM has been added to Chapter 11 Marine Mammals (Document Reference 5.1.11) Section 11.3.1 and 11.5.7, as well as Section 5.7.2 and 5.7.3.2 of Appendix 11.2 (Document Reference 5.2.11.2). Population numbers have been updated to 400 and impact assessments amended. Information regarding IoM haul out sites has been added to in Section 5.7.2 and 5.7.3.2 of Appendix 11.2.
MOR_031_026_020 623	There appears to be a number of Isle of Man marine mammal Reference omissions from this section f the PEIR chapter, despite being recognised as relevant in Section 11.148. There’s a lack of consistency in presentation/treatment of Manx sites, which makes it difficult to be	Appropriate information has been included with Reference to the marine mammals around the IoM. See Section 5 of Appendix 11.2 (Document Reference 5.2.11.2) and Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.8.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>confident of appropriate consideration. These sections should be redrafted, and the other species also reviewed for the same omissions. The Isle of Man Government requests confirmation that the regionally important populations of Risso's dolphin, minke whale and grey seal in Manx waters have been properly and comprehensively considered within the PEIR assessment process (including in Section 11.5.9, Table 11.15 etc. and Section 11.8 Transboundary Effects).</p>	
<p>MOR_031_027_020 623</p>	<p>11.11 Marine Wildlife licence application; please consider whether an equivalent licence may be required under the Isle of Man Wildlife Act 1990 with respect to; · Section 9: Protection of certain wild animals · Section 16: Power to grant licences</p>	<p>Following statutory consultation, the Applicant has continued to engage with the Isle of Man (IoM) Government through the Evidence Plan Process. Applications and assessment will be completed for relevant marine wildlife licences post-consent with final Project parameters.</p>
<p>MOR_031_028_020 623</p>	<p>Please contact the Isle of Man Government, Department of Environment, Food and Agriculture for further information. Marine Conservation Zones Assessment Acknowledging the specific requirements of the Marine and Coastal Access Act 2009 (1.2.1.1) in relation to MCZ, the Isle of Man Government seeks clarification and reassurance that the statutorily-designated marine conservation areas in the Manx territorial sea, ie. Marine Nature Reserves designated under the Wildlife Act 1990, have been adequately, and similarly considered in relation to this project. Noting Figure 1 of the MCZ Assessment Document, and the inclusion of the territorial sea within the 100 km buffer zone, the inclusion of MCZ distal to the Manx territorial sea (South Rigg MCZ), it is surprising that no Reference to the MNRs is included; even as an acknowledgement and explanation for exclusion. The Manx MNRs are included within the Marine Mammal PEIR, but as statutorily-designated marine conservation zones within a neighbouring jurisdiction and with potential transboundary effects, it would seem appropriate to acknowledge them to some extent in this report. For Reference the Manx MNRs are included on the following; OSPAR MPA Database JNCC MPA Mapper Database UNEP/IUCN (Protected Planet) For further information please see: https://www.gov.im/about-the-government/departments/environment-food-and-agriculture/environment-directorate/ecosystem-policy-team/wildlife-biodiversity-and-protected-sites/protected-sites/marine-nature-reserves/</p>	<p>The MCZA includes screening of all MCZs within 100km, including South Rigg, however it has been noted that this site was designated for benthic features outside of the zone of influence of impacts for these features. The Marine Mammal ES chapter included assessment of MNRs, in relation to marine mammal features and all technical topics include MNR assessments for relevant features, e.g. ornithology, fish and benthic.</p> <p>The potential effects on Manx marine protected areas, including transboundary effects, has been assessed and presented in the Report to Inform Appropriate Assessments (Document Reference 4.9), where appropriate.</p> <p>Following statutory consultation, the Applicant has continued to engage with the Isle of Man Government through the Evidence Plan Process, as presented in Consultation Report (Document Reference 4.1).</p>
<p>MOR_031_029_020 623</p>	<p>Chapter 12 Offshore Ornithology The TSC notes the results of the cumulative collision risk assessment in relation to great black-backed gull and look towards the more robust assessment from 2 years of data, in the Environmental Statement to come, noting a potential transboundary connection and the sensitivity of this species in the Isle of Man context (details below). It is also noted that a number of other species utilise the study and may form shared non-breeding populations with the Isle of Man, or connect with Isle of</p>	<p>The Applicant notes your response. The updated assessment for great black-backed gull is presented in Sections 12.6.3.2 (Project-alone) and 12.7.3.2 (cumulative) in Chapter 12 Offshore Ornithology (Document Reference 5.1.12). Potential effects on Isle of Man populations are considered in Section 12.8.1 of Chapter 12 Offshore Ornithology.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>man breeding population, and Manx shearwaters were found in high numbers in July and August, but significant effects on the regional populations of those species is not expected, from the data so far.</p>	
<p>MOR_031_030_020 623</p>	<p>12.39-12.41 Conservation Value – it has been noted that there are no SPAs on the Isle of Man, this being an EU designation and the Isle of Man has never been an EU Member State, nor has a European-level Assessment of seabird interest been undertaken for the Isle of Man, to date, though it is hoped that we can make such an assessment in the future, nevertheless, breeding seabird sites of national importance on the Isle of Man include Maughold Coast and Brooghs ASSI, Central Ayres ASSI/Ayres NNR, Marine Drive ASSI, but also the Point of Ayre (terns), the Calf of Man (seabirds include a recovering colony of Manx shearwaters), and the Sugarloaf/Spanish Head section of coast. The latter two have protection under Manx National Heritage. There is also a series of MNRs with identified seabird interest of relevance. There is one designated Ramsar Site (Ballaugh Curragh) and potential further Ramsar sites have been identified in a report to the Overseas Territories Conservation Forum (https://www.ukotcf.org.uk/conventions/ramsar-2/).</p> <p>A nuanced discussion of conservation value has been provided and it is hoped that the Isle of Man status of site designations, being different from the UK, can be accounted for, without Manx site statuses skewing down the perceived conservation value of any species within the analyses (as non-SPA sites).</p>	<p>Potential effects on Isle of Man designated sites are considered in Section 12.8.1 of Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p> <p>Impacts on Isle of Man designated sites have been considered under Section 12.8 of Chapter 12 Offshore Ornithology (except for Ballaugh Curragh Ramsar site which has been considered in the RIAA (Document Reference 4.9)).</p>
<p>MOR_031_031_020 623</p>	<p>12.4.5 (paragraphs 12.49 and 12.50) - Text here References Chapter 6 (EIA methodology) for the framework & approach, and section 12.8 of Chapter 12 here, for the potential for effects, 'identified in relation to potential linkages to non-UK protected sites and sites with large concentrations of breeding, migrating or wintering birds'. In section 12.8, however, it is not clear that such account has been taken with respect to Isle of Man sites, though we note that the analysis of great black-backed gull, in a cumulative assessment may be more fulsome once 2 years of survey data become available. Please note, with regard to conservation status and transboundary effects, that the Manx Birds of Conservation Concern provides up to date, evidence based assessments of Manx bird statuses and this is available from http://manxbirdlife.im/wp-content/uploads/2021/08/BoCCIoM-2021-TABLES-vWEB04-2021-07-30.pdf.</p>	<p>Impacts on Isle of Man designated sites have been considered under transboundary impacts in Section 12.8 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12). Impacts on great black-backed gull populations have been fully considered in the ES.</p>
<p>MOR_031_032_020 623</p>	<p>12.5.4 Designated sites – this states that connectivity with SPA, Ramsar and SSSI is considered.</p>	<p>Potential effects on Isle of Man designated sites are considered in Section 12.8.1 of Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>

Unique Reference Identifier	Consultation response received	Applicant response
		Impacts on Isle of Man designated sites have been considered under Section 12.8 of Chapter 12 Offshore Ornithology (except for Ballaugh Curragh Ramsar site which has been considered in the RIAA (Document Reference 4.9)).
MOR_031_033_020 623	12.67 notes that effects on SPAs and their component SSSIs are considered in the HRA and 'Accordingly, effects on designated sites are not discussed further within the PEIR'. As SPAs are not a Manx designation, we request that that the transboundary consideration take account of key Manx seabird sites to ensure no deleterious effects, as these will not have been considered within any UK HRA.	<p>Potential effects on Isle of Man designated sites are considered in Section 12.8.1 of Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p> <p>Impacts on Isle of Man designated sites have been considered under Section 12.8 of Chapter 12 Offshore Ornithology (except for Ballaugh Curragh Ramsar site which has been considered in the RIAA (Document Reference 4.9)).</p>
MOR_031_034_020 623	12.6.1 Receptors – those identified include internationally important designated sites for seabirds and migrant birds likely to pass through the study site. It is pointed out that aside from one designated Ramsar site on the Isle of Man, and Marine Nature Reserves with OSPAR recognition, international assessments have not, as yet, included a European level assessment (though we note that there is a report proposing further Ramsar Sites with boundaries and criteria considered). From a Manx perspective, assurance is sought via the Environmental Statement that no Manx bird populations will be significantly adversely affected, and data is available via the JNCC SMP Seabirds Count survey data and the Manx Birds of Conservation Concern data tables. It is noted that the table of receptors includes SPAs and SSSIs with mean maximum foraging range of qualifying breeding seabirds species, and SPAs and SSSIs where qualifying adult seabird population is >1% of the relevant non-breeding BDMPS population. In Manx terms this would relate to ASSIs, Ramsar Sites and Marine Nature Reserves, as a transboundary issue.	<p>Potential effects on Isle of Man designated sites are considered in Section 12.8.1 of Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p> <p>Impacts on Isle of Man designated sites have been considered under Section 12.8 of Chapter 12 Offshore Ornithology (except for Ballaugh Curragh Ramsar site which has been considered in the RIAA (Document Reference 4.9)).</p>
MOR_031_035_020 623	12.6.2 Potential effects during construction – In paragraph 12.94 it is noted that the Calf of Man has been recognised as the closest Manx shearwater colony to the study site, recognising a likely transboundary connection. It is noted that Manx shearwater was scoped out of construction disturbance and displacement screening (Table 12.19), but scoped into Operational disturbance and displacement (on a precautionary basis, due to high densities observed during the breeding season). It would be useful to have an explanation of the different approaches to the two sections in relation to this species.	Manx shearwater are generally considered to have a low susceptibility to disturbance and displacement, particularly during windfarm construction, based on previous studies e.g Bradbury et al. (2014). However, in response to comments received to the PEIR, a precautionary assessment of construction phase disturbance to Manx shearwaters has been included in Section 12.6.3.1 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).
MOR_031_036_020 623	12.6.3 Potential effects during operation and maintenance – disturbance and displacement Manx shearwater – no displacement effect is expected, from the year of data available so far, in relation to background mortality in regional population during breeding, but it is queried whether there might be any effect on the Calf of Man breeding colony, which is relatively small, but recovering and increasing in shearwater numbers. Manx National	Seabird breeding data from the Calf of Man for 2022 has been obtained from Manx Wildlife Trust; refer to Section 12.8.1 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).

Unique Reference Identifier	Consultation response received	Applicant response
	Heritage and Manx Wildlife Trust (who currently warden it for MNH) will have the most up to date figures for the colony counts.	
MOR_031_037_020 623	<p>12.6.3.2 Collision risk</p> <p>12.255 Common gull Reference population – the text notes one breeding colony within mean max foraging range, with only one nest. It is pointed out that a small number of common gulls nest in the vicinity of the Point of Ayre on the Isle of Man (5 pairs according to the recent Manx BoCC). Although the breeding period collision risk is not high, it is not known whether there is a link between this breeding population and wintering within the study site. It is noted that no significant effect of collision risk was predicted in a regional context. Migrant collision risk 12.269 – features of SPAs and Ramsar sites were screened in. Note, please, that the Isle of Man does not have SPAs, nor has it had a European level assessment of interest for designation, however it does have a Ramsar Site, which is not listed in this section: Ballaugh Curragh, which has wintering hen harrier quoted as an interest in its designation (there is also a breeding population of significance on the Isle of Man – over 38 territorial pairs in the 2022 survey on the IoM and the Greeba Mountain and Central Hills ASSI includes sites used for breeding http://manxbirdlife.im/wp-content/uploads/2022/10/Report-on-the-Isle-of-Man-Hen-Harrier-Breeding-Census-2022-v2022-10-10-PUBLIC-1.pdf). However, it is noted that hen harrier has been assessed (Table 12.47) and that no species assessed showed any prediction of collision, based on a 98% avoidance rate (and no hen harrier collision with no avoidance, either). The omission should not therefore have affected the result. 12.7 Cumulative effects – noted that the Isle of Man wind farm has been acknowledged in the list, though there is no published data currently, and the PEIR states that inclusion will be reviewed at the Environmental Statement stage. Also noted that great black-backed gull has potential to have a moderately adverse effect which is ‘potentially significant’ in EIA terms in relation to the regional population. It is pointed out that the Isle of Man has long held a significant population in a regional context, but that the Isle of Man breeding population is in severe decline, across the last 15 and 30 years (Manx BoCC data). Assurance is being sought that there is no threat to the Isle of Man population of this species. PVA may become appropriate and the Manx population should be taken into account in site apportioning. 12.8 Transboundary effects – although the PEIR report notes that this will be revisited, it states that effects are likely to be lower than the cumulative effects due to larger Reference populations. However, from the perspective of the Isle of Man, one of the transboundary nations which might be affected, the regional Reference populations utilised, should already include the Isle of Man. Transboundary interests for the Isle of Man lie in a consideration of</p>	<p>Collision risk modelling for common gull has been updated within the ES, based on 24 months survey data. Collision risk for this species has decreased since PEIR; refer to Section 12.6.3.2 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p> <p>Migrant collision risk:</p> <p>Impacts on Ballaugh Curragh Ramsar site have been considered in the RIAA. The migratory non-seabird collision risk assessment has predicted zero hen harrier collisions based on a 98% avoidance rate and 0.13 hen harrier collisions with no avoidance (Section 12.6.3.2 in Chapter 12 Offshore Ornithology); rates of this magnitude were considered to be negligible in EIA terms and would not affect any Isle of Man sites/populations.</p> <p>Cumulative effects:</p> <p>Effect on Isle of Man breeding colonies have been considered in Section 12.8.1. It should be noted that data used in the wider assessment included available colony counts from Isle of Man in the Seabird Monitoring Programme (SMP) database. The Scoping Report for the Mooir Vannin offshore windfarm (Ørsted, 2023) was reviewed, but it is noted that no quantitative data is yet available for this project, so not included in cumulative estimates presented in Section 12.7 in Chapter 12 Offshore Ornithology.</p> <p>Transboundary effects:</p> <p>Impacts on Isle of Man populations have been considered in Section 12.8.1 (except for Ballaugh Curragh Ramsar site which has been considered in the RIAA (Document Reference 4.9)).</p> <p>Aerial surveys reports:</p> <p>Agree paragraph 154 should read ‘The nearest SPA-designated colonies to the survey areas are likely to be those associated with the Rathlin Island or Ailsa Craig SPAs’. This has been updated in Appendix 12.2 (Document Reference 5.2.12.2). Impacts on Manx shearwater associated with Calf of Man and other non-SPA colonies have been considered under transboundary impacts (Section 12.8.1 in Chapter 12 Offshore Ornithology).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>whether effects might have the potential to adversely impact Manx bird populations or key bird sites on the Isle of Man. The migrant analysis indicates that a migrant effect is unlikely, so the interest lies with the seabirds. One species likely to be of interest, taking account of the impacts assessment so far, is the great black-backed gull, as the Isle of Man has long held a significant population in the regional context, and also now due to the severe decline in the breeding pop on the Isle of Man. This population lies within foraging range of the study site so a transboundary effect is indeed possible and warrants recognition and consideration in relation to the IoM. Another species, mentioned above, is the Manx shearwater, with respect to any potential site effect, (but noting that no significant effect on the regional population has been predicted here, on the data so far, but there are much larger colonies within the region). The recent recovery of the Calf of Man breeding colony must be safeguarded. Also with regard to potential site effects, the Isle of Man seabird sites will not have been assessed within the HRA assessment as the Isle of Man has never been a Member State of the EU. The analysis in this section should therefore also consider whether there could be such effects or not, and may Reference other sections of the analysis, if potential Isle of Man connections have been considered in other sections. Appendix 12.2 Aerial Surveys Report – Discussion paragraph 154 guillemot – ‘The nearest colonies to the survey areas are likely to be those associated with the Rathlin Island or Ailsa Craig SPAs’ – should this state, the nearest SPA-designated colonies? There will be many closer colonies, including those on the IoM, though the peak was at the end of breeding post-breeding period so they may be coming from a wide area. Disc para 157 - Manx shearwater were mainly seen during July and Aug in this first year of data analysed. They have a very long foraging range but we note that the Calf of Man colony, for a Manx shearwater, is very closeby and there is a high likelihood of a connection, as well as with some other colonies.</p>	

Unique Reference Identifier	Consultation response received	Applicant response
MOR_031_038_020 623	<p>Chapter 13 Commercial Fisheries</p> <p>Summary Statement: In relation to the Assessment of Effects and Cumulative Effects Conclusions in the PEIR, the Isle of Man Government is concerned that the apparently limited coverage of Manx fleet interests in the baseline data (as outlined in detailed comments) may not adequately take into account the Isle of Man's fisheries interest within the regional study area. As such, the TSC seeks reassurance that the comments made will be reviewed and a more comprehensive re-assessment of the Manx fisheries interests will undertaken prior to finalisation of the EIA Document, with results provided to the Territorial Sea Committee for further consideration. The IoM Government notes that the Regional Commercial Fisheries Zone for the project includes almost all of the Manx territorial sea (Figure 2.2) and that the Local Commercial Fisheries Study Area lies very close to the TS boundary, as such, Manx commercial fisheries should be comprehensively considered in the PEIR and future EIA assessments using the best available data.</p> <p>Unfortunately the technical report for this chapter appears not to have comprehensively considered the differences between UK and Manx waters, despite Manx waters representing a significant part of the Regional study area. Please see below for details and, for an overview of Manx fisheries; https://www.gov.im/media/1363405/ch-41-fisheries.pdf For the latest information please see: · https://www.gov.im/about-the-government/departments/environment-food-and-agriculture/environment-directorate/fisheries/sea-fisheries/ · https://www.gov.im/fishing/conditions#accordion · https://www.gov.im/about-the-government/departments/environment-food-and-agriculture/environment-directorate/fisheries/sea-fisheries/legislation-policy-guidance/</p>	<p>The Applicant notes your response. Information has been updated in the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1)) and Chapter 13 Commercial Fisheries (5.1.13) to explicitly refer to Isle of Man vessels separately within the impact assessment (Section 13.6 in Chapter 13 Commercial Fisheries) and CEA (Section 13.7 in Chapter 13 Commercial Fisheries).</p> <p>The Commercial Fisheries Technical Report (Appendix 13.1 (Document Reference 5.2.13.1)) has been updated with the data provided by the Isle of Man Government, and the section on Isle of Man fisheries has been extended to include information from the links provided (Appendix 13.1, Section 3.3.8 in Chapter 13 Commercial Fisheries).</p>
MOR_031_039_020 623	<p>Table 2.1 – note that ALL Manx and UK-registered vessels operating mobile gear inside the territorial sea have a requirement to operate a VMS system. As such data for all vessels is available to inform this sector in Manx waters.</p>	<p>It is understood that all Manx and UK-registered vessels operating in Manx waters are equipped with VMS.</p>
MOR_031_040_020 623	<p>Comments on data sources:· Landings data from 2016-2021 should be stretched further back is possible. Many fisheries are cyclical, following 7-8 year recruitment cycles, and a hindcast analysis should attempt to acknowledge this in its timeframe.</p>	<p>Cyclical nature of landings is understood. The Technical Report (Appendix 13.1 (Document Reference 5.2.13.1)) has been updated to present long term data for queen scallop landings from 2011 to 2022.</p>
MOR_031_041_020 623	<p>· MMO only provide data for over-15 m. This is a significant issue in properly understanding the temporal/spatial extent of fishing activity in proposed development areas, particularly those such as Morecambe that could feasibly be being fished by some under-15 m vessels.</p>	<p>It is correct that VMS data provided by the MMO covers vessels that are 15m and over in length. MMO landing statistics data covers all vessel lengths for Isle of Man and UK-registered vessels. Freedom of Information requests were submitted to the MMO to request VMS data for vessels 12-15m in length, but the MMO confirmed that it was not possible to provide this dataset.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_031_042_020 623	<p>· Figure 3.12 is an example of potential under-representation of <15m vessels, which shows large, dredge-based Scottish vessels exceeding Manx vessels in terms of value. · For comparison, Manx Government statistics indicate QSC landings into Manx ports, from all vessels, had a value in excess of £16m over the period 2011-2021 · The use of AIS as a means to address the risk of underrepresentation of <15m is not considered adequate, noting that other concurrent PEIR processes have included observational data. In the absence of additional data sources, specific engagement with local Producer Organisations and fishing Industry representatives should be undertaken in relation to this issue.</p>	<p>Figure 3.12 in Appendix 13.1 (Document Reference 5.2.13.1) was sourced from landing statistics which includes all vessel lengths, including under 15m vessels. It represents data for all UK and Manx-registered vessels of all vessel lengths.</p> <p>For comparison, the MMO landing statistics data indicate a total value of queen scallops from the regional study area summed for 2011 to 2021 of £ 9.8 million for Manx vessels and £39.1 million for other UK vessels; this represents an average annual value of £890,000 for Manx vessels and £3.5 million for other UK vessels. The data is reflective of the values indicated in the data provided by the Isle of Man Government, which would cover an area wider than the Project commercial fisheries regional study area, but only represents landings in Manx ports.</p>
MOR_031_043_020 623	<p>Based on the relative distance from the Isle of Man, and the typical fishing patterns of the Manx fleet, it is acknowledged as likely that the Morecambe site will have limited direct impact upon Manx vessels; however, the displacement effects, particularly in relation to queen scallops, could have significant impacts upon important grounds elsewhere in the regional study area. The EIA should fully consider the displacement effects, and in the context of cumulative impacts of adjacent windfarm developments, and the potential for increased fishing area in nearby grounds within the eastern Irish Sea if the EIA determines that existing activity is indeed likely to be displaced. It appears that the majority of existing dredge activity (targeting molluscs) is toward the southern end of the site, and so mitigation of this impact may be possible through array configuration. For clarity, please ensure that Reference to IoM-registered vessels is clearly stated if they are included in UK-registered vessels data, otherwise requests for such clarity will continue to be made. It is important to the Isle of Man Government that it is evident that the Manx fleet has been appropriately considered as part of this process. As the Isle of Man is not part of the UK, the assessment must also be considered in the context of a separate/neighbouring jurisdiction, with its own legislative system, and in terms of transboundary effects. It should be recognised that legislation may be different but also that international treaty and convention commitments may be relevant to the Isle of Man.</p>	<p>Comment regarding the IoM registered vessels is noted and updated within the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1)) and throughout Chapter 13 Commercial Fisheries.</p> <p>Further detail added to Section 3.3.8 of Appendix 13.1.</p> <p>The Applicant has committed to the development of and adherence to a Fisheries Liaison and Co-existence Plan (FLCP), in accordance with the Outline FLCP submitted with our application (Document Reference 6.4), that provides the mechanism for evidence-based compensation for disturbance.</p> <p>The Applicant has committed to join a Commercial Fisheries Working Group with the other projects in the Irish sea to collate fisheries data to further assess potential cumulative effects.</p>
MOR_031_044_020 623	<p>3.2.1 Scallop dredge: please note that Isle of Man vessels typically do not target queen scallops using a dredge, and that queen scallops are not caught in Manx waters using a dredge. As such, in the context of the Regional study area, it should be recognised that both gear types are used to catch scallop species, and that fleet characteristics and spatial considerations are relevant.</p>	<p>The Applicant notes your response. Queen scallop has been added to the list of species targeted by demersal otter trawl in Technical Report Section 3.2 of Appendix 13.1 (Document Reference 5.2.13.1).</p>
MOR_031_045_020 623	<p>Queen scallop It is also noted that research information and stock assessments being used as an indicator for wider Irish sea stocks, must consider gear differences, and that queen scallops are only fished for around 4</p>	<p>The Applicant notes your response. Information has been updated in the Technical Report Section 3.2 of Appendix 13.1 (Document Reference 5.2.13.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>months in Manx waters (in part due to preferred use of trawl gear), compared to around 9 months of fishing for QSC in UK waters. So there are other contributing factors to stock assessment and trends that must be considered before making comparisons. Please note latest data on QSC stock is available</p> <p>http://sustainable-fisheries-iom.bangor.ac.uk/Documents/government-reports/scallop/2022/QSC_StockAdvice_Report_2022_Final.pdf See also: http://sustainable-fisheries-iom.bangor.ac.uk/communications.php.en There are significant management measures in place for queen scallops in the Manx territorial sea, including catch limits and a 55mm MLS, contrary to information contained in this section. For details please see IoM licence conditions: https://www.gov.im/fishing/conditions#accordion</p>	
MOR_031_046_020 623	<p>King scallop</p> <p>For latest scallop stock status report in Manx waters please see : http://sustainable-fisheries-iom.bangor.ac.uk/Documents/government-reports/scallop/2022/SCESurveyReport2022_Final.pdf There are catch limits in place for king scallops in Manx waters. For details please see IoM licence conditions: https://www.gov.im/fishing/conditions#accordion</p>	The Applicant notes your response. Information has been updated in the Technical Report Section 3.2 of Appendix 13.1 (Document Reference 5.2.13.1).
MOR_031_047_020 623	<p>3.2.2 Pots and Traps</p> <p>Table 3.3 appears to have completely excluded Manx static gear vessels operating within the Regional study area, including within the IoM territorial sea. For example Manx data (2018-2021) on landings (all vessels) and value into the IoM indicates the following; Please address this oversight accordingly. Please note, in Manx territorial sea the following MLS apply; Whelk = 75 mm Lobster = 90 mm Brown crab = 140 mm For details on licencing and management measures in place please see; https://www.gov.im/fishing/conditions#accordion</p>	In relation to Manx potting, this fleet is not active across the windfarm site and therefore impacts are restricted to cumulative effects in the regional study area as assessed in Section 13.7 in Chapter 13 Commercial Fisheries (Document Reference 5.1.13).
MOR_031_048_020 623	<p>3.2.6 Demersal otter trawl</p> <p>This section, and Figure 3.7, appears to have completely excluded queen scallop from this gear type, which is predominantly caught in Manx water using otter trawl. See Figure 3.28, which shows otter trawl activity in Manx waters not associated with the species mentioned in 3.2.6</p>	The Applicant notes your response. Updated information provided by the Isle of Man Government has been added to the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1)), specifically fishing activity mapping within the Isle of Man territorial waters.
MOR_031_049_020 623	<p>This is a significant oversight and should be corrected.</p> <p>Queen scallop: fishing activity map (otter trawl) based on EU VMS data (2018-2022) from Citrix (available from MMO) merged with NestForms data (held by DEFA, IoM Government). Alternatively, EU logbook data from Citrix (available from MMO) could be used in place of NestForm data.</p>	The Applicant notes your response. Updated information provided by the Isle of Man Government has been added to the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1)), specifically fishing activity mapping within the Isle of Man territorial waters.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_031_050_020 623	<p>3.3. Fishing Activity Assessment</p> <p>As noted above, the use of >12 and > 15m vessel data is unlikely to provide a comprehensive assessment. For example, Figure 3.25 shows limited static gear activity in Manx waters, however, data plotted recently by IoM Government shows much more static gear activity for the Manx territorial sea area.; Data on smaller Manx static gear vessels could be obtained from various sources, including Isle of Man Government, MFPO or Manx fishermen directly. Crab and lobster commercial fishery activity data (2010 to 2021) (static gear) based on pot hauls (as a proxy for fishing effort/activity)). Data is obtained from monthly shellfish activity forms, but which does not contain EU logbook data from larger U.K. vessels (I.e. U.K. vessels fishing in 38E5), and so is not comprehensive. It is not known whether these data is available on Citrix (i.e. from MMO), or whether only DEFA holds it. Whelk commercial fishery activity map (2010 to 2021)(static gear) based on pot hauls (as a proxy for fishing effort/activity)). Data is obtained from monthly shellfish activity forms, but which does not contain EU logbook data from larger U.K. vessels (I.e. U.K. vessels fishing in 38E5), and so is not comprehensive. It is not known whether these data is available on Citrix (i.e. from MMO), or whether only DEFA holds it.</p>	<p>The Applicant notes your response. Updated information provided by the Isle of Man Government has been added to the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1)), specifically fishing activity mapping within the Isle of Man territorial waters.</p>
MOR_031_051_020 623	<p>Where in Figure 3.30 is Manx-registered vessel data, which contains UK, Northern Irish and Irish vessels? Manx vessels significantly target scallops in the regional study area, especially within the territorial sea; so their apparent exclusion questions the comprehensiveness of the baseline and consequent assessment. King scallop: fishing activity map (dredge) based on EU VMS data (2017/18-2021/22) from Citrix (available from MMO) merged with NestForms data (held by DEFA, IoM Government). Alternatively, EU logbook data from Citrix (available from MMO) could be used in place of NestForm data.</p>	<p>Figure 4.14 of Appendix 13.1 (Document Reference 5.2.13.1) has been data mapped by the ICES Scallop Working Group. It has been confirmed with the IoM government that that the UK grounds include Isle of Man vessels.</p> <p>Manx vessels have been included in the impact assessment (Section 13.6) and Cumulative Effects Assessment (Section 13.7).</p> <p>The information provided by the Isle of Man Government has been added to the Technical Report (Appendix 13.1), specifically fishing activity mapping within the Isle of Man territorial waters.</p>
MOR_031_052_020 623	<p>3.3.8 Isle of Man Fisheries Activity Assessment As noted above, this section appear to be less than comprehensive. Due to the importance of the fishing industry to the Manx economy and territorial sea, and their inclusion within the Regional study are for this development proposal, the Isle of Man Government requests that this section is reviewed, and assessed accordingly within the technical report and PEIR.</p>	<p>The Applicant notes your response. Section 3.3.8 of Appendix 13.1 (Document Reference 5.2.13.1) has been updated to include the information provided by the Isle of Man Government which has informed the impact assessment (Section 13.6 in Chapter 13 Commercial Fisheries (Document Reference 5.1.13)) and CEA (Section 13.7 in Chapter 13 Commercial Fisheries).</p>
MOR_031_053_020 623	<p>5 Summary</p> <p>As above, this section does not reflect the appropriate inclusion of the Isle of Man within the regional study area. In fact, it is not mentioned at all in the summary, which is surprising considering the territorial sea comprises a significant area of fishing activity and is largely within the regional study area.</p>	<p>The Applicant notes your response. The ES has been updated to define Manx and UK vessels and incorporate the information and data provided by the Isle of Man Government. Further information is presented in Chapter 13 Commercial Fisheries (5.1.13) and Appendix 13.1 (Document Reference 5.2.13.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_031_054_020 623	<p>PEIR 13.15- 13.16 and 13.17</p> <p>When dealing with potential interactions with non-EU jurisdictions, it may be necessary to consider the equivalent of species and area protections. For the Isle of Man, which is not, and has never been an EU member state, please refer to the Wildlife Act 1990 for legal protection within Manx waters. Manx Marine Nature Reserves have specific fisheries management measures applied and, as noted above, specific management measures apply to Manx waters which should be considered in terms of displacement effects. For example, it cannot be assumed that displaced vessels from the array area can fish in Manx waters (thereby concentrating displacement in a reduced UK waters area. Similarly, displacement into Manx waters must be considered in the context of Manx legislation, policies and strategies eg. the recently adopted LTMP for scallops, which fundamentally restricts access in favour of economic benefit to licenced vessels, whose numbers are broadly matched to track record and stock status; https://www.gov.im/media/1376550/ltmp-10-260522.pdf https://www.gov.im/media/1376551/sf-04-2022-capacity-reduction-programme-king-scallop-v2.pdf https://www.gov.im/media/1376552/sf-05-2022-grandfather-rights-king-scallop-260522.pdf Legislative and fisheries management and policy objectives within a non-UK jurisdiction inside the Regional fisheries study area should at least be acknowledged, even if found not to be significant in EIA terms. See Chapter 1.2 of the Manx Marine Environmental Assessment: https://www.gov.im/media/1363391/ch-12-legislative-system.pdf</p>	<p>The Applicant notes your response. Information has now been included in the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1), Section 3.3.8, which has informed the impact assessment (Section 13.6 in Chapter 13 Commercial Fisheries (Document Reference 5.1.13)) and CEA (Section 13.7 in Chapter 13 Commercial Fisheries).</p>
MOR_031_055_020 623	<p>13.22 Please confirm that Isle of Man-registered vessels have been included in landing statistics.</p>	<p>It is confirmed that Isle of Man registered vessels have been included in the landing statistics. For EU (including UK) VMS data is it understood that Isle of Man vessels are included in the UK dataset.</p>
MOR_031_056_020 623	<p>13.4.6 Assumptions and Limitations Please see comments above on the Technical Report relevant to this consideration. 13.42: as noted elsewhere, it is understood that MMO VMS data is not limited to >15m vessels. Manx data, which is dominated by <15m vessels is available on the MMO database.</p>	<p>The Applicant notes your response. Data is now included in the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1)).</p>
MOR_031_057_020 623	<p>13.5.2 Description of Fishing Fleets etc Please see comments above on the Technical Report relevant to this consideration, in particular the absence/limited inclusion of Manx-related otter trawl and static gear activity. Table 13.12: ditto, as it has a complete absence of Isle of Man Reference within the regional study area.</p>	<p>The Applicant notes your response. This section has been updated in the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1), Section 3.3.8) which has informed the impact assessment in Chapter 13 Commercial Fisheries (Document Reference 5.1.13) (Section 13.6) and CEA (Section 13.7). In addition, Table 13.12 (Chapter 13 Commercial Fisheries) includes Reference to Manx fleets. Demersal otter trawl has been updated to include queen scallops as a target species.</p>
MOR_031_058_020 623	<p>13.6 Assessment of Effects Table 13.13 – no Reference to QSC as target species for otter trawl. Overall, the Isle of Man Government is concerned that the apparently</p>	<p>The Applicant notes your response. It is confirmed that both the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1) and Chapter 13 Commercial Fisheries (Document Reference 5.1.13) have been updated to explicitly state inclusion of Isle of</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>limited coverage of Manx fleet interests the baseline data (outlined above), and therefore the resultant effects assessment, does not adequately take into account the Isle of Man's fisheries interest within the regional study area. As such, the TSC seeks reassurance that the comments made will be reviewed and a more comprehensive re-assessment of the Manx fisheries interests will be undertaken prior to finalisation of the EIA Document, with results provided to the Territorial Sea Committee for further consideration.</p>	<p>Man vessels within the data and to incorporate the information and data provided by the Isle of Man Government.</p>
<p>MOR_031_059_020 623</p>	<p>13.7 Cumulative Effects</p> <ul style="list-style-type: none"> · Please also note Crogga gas project: https://www.crogga.im/ · And a likely second electricity interconnector between IoM and UK. Contact Manx Utilities Authority for details. Overall, the Isle of Man Government is concerned that the apparently limited coverage of Manx fleet interests the baseline data (outlined above), and therefore the resultant effects assessment, does not adequately take into account the Isle of Man's fisheries interest within the regional study area. As such, the TSC seeks reassurance that the comments made will be reviewed and a more comprehensive reassessment of the Manx fisheries interests will undertaken prior to finalisation of the EIA Document, with results provided to the Territorial Sea Committee for further consideration. 	<p>The Applicant notes your response. Information has been updated in the Technical Report (Appendix 13.1 (Document Reference 5.2.13.1) and Chapter 13 Commercial Fisheries (Document Reference 5.1.13) to explicitly refer to Isle of Man vessels separately within the impact assessment (Section 13.6) and CEA (Section 13.7).</p>
<p>MOR_031_060_020 623</p>	<p>Chapter 14 Shipping and Navigation</p> <p>The TSC is particularly concerned about the cumulative impacts from all of the proposed windfarms awarded as part of The Crown Estate's Round 4 project, and would want to see this fully taken into account as part of the subsequent EIA to be submitted as part of the Development Consent Order application. As an island nation, any significant risk of interference with marine navigation is of concern to the TSC with regard to transport to and from the island, and the shipping lanes in our Territorial waters which are used to connect the UK and Ireland. The TSC appreciates that the Isle of Man Steam Packet Company (IOMSPC) has until now been kept involved in this process including early project consultation meetings, and involvement in the Navigation bridge simulations. It is essential that the Island's shipping companies, the Isle of Man Steam Packet Company and other shipping companies are continuously engaged throughout this process. Representatives from the TSC have been involved in the Maritime Navigation Engagement Forum encompassing all the neighbouring Round 4 offshore windfarm sites, and will continue throughout the duration of this process. The TSC suggests that it might be useful to also include Douglas Port as one of the pilot boarding stations for Liverpool in Table 14.12 given that it is the same distance away (at 29nm north west, as per Table 14.13) as Point Lynas. Douglas is an important port for both boarding the pilots, as well as providing shelter during periods of adverse weather. It should also be noted that there are RNLI Stations</p>	<p>The potential cumulative effects arising from the Irish Sea Round 4 projects are assessed in Section 14.7 and detailed within the CRNRA (Appendix 14.2 (Document Reference 5.2.14.2)). Ferry operators, including IoMSPC, participated in the Navigation simulations and hazard workshop held to inform the CRNRA. The assessment concludes that with the embedded mitigation measures in place, including the project boundary changes made since PEIR, the potential effect on Navigation safety and routeing is moderate ALARP, and therefore not significant in EIA terms.</p> <p>Due to the release of the Scoping Report for the Mooir Vannin OWF in October 2023, after the completion of many of the activities undertaken to inform the CRNRA, an addendum to the CRNRA was prepared to consider the additional cumulative risks that may result to vessel traffic identified within the CRNRA (Appendix 14.2). While unacceptable cumulative navigation risks have been identified when also considering the proposed Mooir Vannin OWF project, the Project is not considered to contribute to these high-risk areas.</p> <p>Updates to Table 14.12 and Table 14.14 have been made to include Douglas Port and IoM RLNI stations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>located in Port Erin, Port St.Mary and Peel in the Isle of Man (at 40nm, 41nm, and 43nm). The TSC notes the acknowledgement of the presence of the IOMSPC and both its routes in the Irish Sea, noting that for the the Manannan, its voyage passes primarily to the west of the proposed site (14.68). Of greatest concern to the TSC in respect of shipping and navigation is in respect of the impacts relating to the ferry routeing. Impact 1: Impact on ferry routeing (under normal sailing conditions):</p> <p>The TSC acknowledges that there will be a slight deviation required from IOMSPC vessels in respect of the construction and the operation phases, which could result in 8% re-routing however it is not envisaged from this analysis that it will require additional travel time (shown in Table 14.19). Confirmation should be sought from the IOMSPC that this mitigation is acceptable to them. It is further acknowledged that adverse weather is not expected to affect the adverse weather routes used by the IOMSPC. The TSC would welcome further engagement with the project team if and when any amendments are considered to the boundary of the site which may minimise impacts to passage.</p> <p>Cumulative effect assessment methodology The TSC acknowledges the inclusion of the site subject to an Agreement for Lease with Ørsted for a proposed offshore windfarm in Isle of Man territorial waters (at 38.2km away from Morecambe Bay Array Area) has been taken into account as part of the EIA methodology as part of the Cumulative Effects Assessment, as set out in Chapter 6 and in the Shipping Chapter 14. The TSC further notes that it has been considered that there is insufficient information available about the project at the minute, however it has been acknowledged at high level at this stage. The TSC is pleased to see that the site will be further considered at the Environmental Statement stage. It is essential to ensure that there is no barrier or restrictions placed on the ability for Search and Rescue efforts to be hampered as a result of the proposed Morecambe Bay Array Area and indeed, the cumulative impact of all projects identified within the Cumulative Regional Navigation Risk Assessment.</p>	
MOR_031_061_020 623	<p>Impact on ferry routeing</p> <p>The TSC notes that the findings from the Cumulative Regional Navigation Risk Assessment which identifies that during adverse weather, there is the potential for impact to both IOMSPC routes in terms of additional time in minutes per journey which will, from a commercial perspective add additional costs to the company in terms of fuel to be burned, and any requirements to additional emissions being offset. The TSC notes that in respect of the Douglas Liverpool route and deviations as a result of the Mona Array Area, this addition is forecasted at an additional 17 minutes journey time, while for the Douglas Heysham route to deviate around the Morgan Array Area, it is forecasted at an additional 27 minutes on top of an existing delay. It is</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>however acknowledged in para 14.26 that these impacts are driven by Morgan and Mona rather than Morecambe Bay which has outlined in the Shipping and Navigation Chapter that even during adverse weather conditions, there is no impact to IOMSPC services. The TSC awaits continued engagement to explore the further mitigation measures and residual effects to be considered and proposed by the project teams, particularly in respect of shipping and navigation as part of the cumulative impact assessment. The TSC is deeply concerned about the cumulative impact all of these offshore windfarms could have on its lifeline services and any deviations to well established routes will not be accepted. The Navigation Risk Assessment The Navigation Risk Assessment includes a summary of a number of main, overarching concerns that the TSC wishes to repeat here as all are applicable in respect of shipping and navigation for the Isle of Man. In particular, the TSC acknowledges that there would be a requirement for the rerouteing of a small proportion of IOMSPC vessels which currently equate to 8% of the total crossings which route through the Morecambe Bay Array Area. It would be necessary for these vessels to follow the path of the greater proportion of IOMSPC journeys within this vicinity, at 2nm to the southwest corner of the Array Area. The TSC would seek confirmation that this is acceptable to the IOMSPC</p>	<p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA</p>
<p>MOR_031_062_020 623</p>	<p>Chapter 16 Civil and Military Aviation and Radar (Ronaldsway Airport) As an airport, we take the safety and security of our passengers, employees, and aircraft very seriously, and we understand that the development of offshore wind farm can potentially impact aviation safety. To ensure the safety of aircraft operating in the vicinity of offshore wind farms, it is essential that appropriate mitigation measures are put in place to ensure that any potential impacts on aviation safety are identified and addressed. This includes conducting thorough impact assessments, technical safeguarding assessments of aerodrome navigation systems, developing appropriate mitigation measures, and regularly monitoring the wind farm's impact on aviation safety to ensure that these measures remain effective. We are committed to working collaboratively with all stakeholders to ensure that any development of offshore wind farms does not compromise the safety of air travel and welcome any opportunities for further engagement with the project teams.</p>	<p>The Applicant is in engagement with Isle of Man Ronaldsway Airport (IoM Airport).</p> <p>A detailed technical safeguarding analysis of Instrument Flight Procedures (IFP) was undertaken, confirming there is no impact to the IoM Airport. Radar Line of Sight analysis predicts a potential cumulative impact with the other Round 4 projects (Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project) to the IoM Airport's Primary Surveillance Radar (PSR) system. Engagement with the IoM Airport remains ongoing on this matter.</p> <p>Further information on our assessments can be found in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).</p>
<p>MOR_031_063_020 623</p>	<p>Chapter 17 Infrastructure and Other Users The TSC appreciates that there is mention, and inclusion of the Isle of Man interconnector between the Island and England as part of this chapter as it transects through the proposed Morgan array areas. The comments and feedback outlined below have been drawn up following a review of the information made available to the Manx Electricity Authority for the purpose of stakeholder consultation regarding project proposals relating to the above Wind Farm development. The</p>	<p>It is noted that the Isle of Man Interconnector is 4.6km (c.2.5nm) to the north of the Project windfarm site and as such there is no expected direct interaction with the Isle of Man interconnector. These comments may be more relevant to the Morgan Offshore Wind Project Generation Assets. Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>comments, views and feedback outlined in this Document relate to those of the Manx Cable Company and Manx Electricity Authority, as stakeholders, considering the proximity of the proposed wind farms to our existing assets in the Eastern Irish Sea as well as significant stakeholders in the social-economic success of the Isle of Man.</p> <p>Background Information: The Manx Cable Company (MCC) own and operates, on behalf of the Manx Electricity Authority, a submarine power cable, referred to as the interconnector, which runs between Douglas Head in the Isle of Man and Bispham, Blackpool. With an undersea section of approximately 104km (65 mi), it is one the longest AC undersea cables in the world and is an essential means of maintaining secure supplies of electricity to the residents of the Isle of Man. Sub-sea cables are vulnerable to third-party damage from marine activities and these risks are constantly being monitored and assessed, as the impact from third-party damage can result in significant repair and business interruption costs to the Authority.</p> <p>In addition to third-party damage the introduction of fixed structures and associated export, collector and/or array cables on or buried in the seabed, can through their proximity present an ongoing operational risk to maintenance and repair works over the life of the asset. Considering the interconnector's asset value and strategic importance to our business and the wider Manx economy the MCC welcomed the opportunity to engage in the project consultation process regarding developments in the Eastern Irish Sea.</p> <p>Interpretation of Wind Farm Proximity to the Interconnector: The wind farm is located to the south of the interconnector; no direct conflict. The wind farm export cables will be positioned within the indicative cable corridor, which runs from the wind farm boundary towards northwest coast of England narrowing to a point north of the Ribble Estuary. Our asset runs along the northern boundary of the proposed export cable corridor where it terminates north of Blackpool. Comments and Feedback: The comments and feedback, relate to concerns, which have been identified following an Impact/Risk Assessment regarding the potential increase in risk to the interconnector, through the construction and operational phases of the proposed Wind Farm.</p>	
MOR_031_064_020 623	<p>Item Risk Category Potential Increase in Risk Level of Concern</p> <p>Comments</p> <p>Third Party Damage</p> <p>Displacement of fishing activity increases fishing Low The impact of displaced fishing activity may present an unacceptable increase in interaction, from present levels, over the cable route. risk considering the collective impact of Eastern Irish Sea in the future.</p>	<p>It is noted that the Isle of Man Interconnector is 4.6km (c.2.5nm) to the north of the Project windfarm site and as such there is no expected direct interaction with the Isle of Man interconnector. These comments may be more relevant to the Morgan Offshore Wind Project Generation Assets. Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14). Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_031_065_020 623	Third-Party Damage Survey works [Geotechnical] which are invasive and interacts with the sea bed in close proximity to the IOM interconnector High Request developer engages as soon as it is practicable with MCC to review any survey with 1NM and assess the risk presented by the proposed survey works due to it nature and proximity.	It is noted that the Isle of Man Interconnector is 4.6km (c.2.5nm) to the north of the Project windfarm site and as such there is no expected direct interaction with the Isle of Man interconnector. These comments may be more relevant to the Morgan Offshore Wind Project Generation Assets. Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14). Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14).
MOR_031_066_020 623	3 Third-Party Damage [1] Cable installation [export cables] High Request developer engages as soon as it is practicable with MCC to review any cable installation activities with 1NM and assess the risk presented by the proposed works due to it nature and proximity.	It is noted that the Isle of Man Interconnector is 4.6km (c.2.5nm) to the north of the Project windfarm site and as such there is no expected direct interaction with the Isle of Man interconnector. These comments may be more relevant to the Morgan Offshore Wind Project Generation Assets. Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14). Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14).
MOR_031_067_020 623	4 Third-Party Damage [1] Fixed Structure installation [offshore sub-stations] High Request developer engages as soon as it is practicable with MCC to review any offshore construction activities with 1NM and assess the risk presented by the proposed works due to it nature and proximity.	It is noted that the Isle of Man Interconnector is 4.6km (c.2.5nm) to the north of the Project windfarm site and as such there is no expected direct interaction with the Isle of Man interconnector. These comments may be more relevant to the Morgan Offshore Wind Project Generation Assets. Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14). Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14).
MOR_031_068_020 623	5 Operational Risk [1] Close proximity of fixed structures such as offshore substations Medium Request developer engages as soon as it is practicable with MCC to open dialogue on determining a suitable proximity limit where the planned proximity of any fixed structure is within 1NM of the IOM interconnector	It is noted that the Isle of Man Interconnector is 4.6km (c.2.5nm) to the north of the Project windfarm site and as such there is no expected direct interaction with the Isle of Man interconnector. These comments may be more relevant to the Morgan Offshore Wind Project Generation Assets. Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14). Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14).
MOR_031_069_020 623	6 Operational Risk [1] Third-party cable crossings Medium Request developer avoids, wherever possible, multiple crossings of the IOM interconnector by export, collector and/or array cables. Where multiple cable crossings are necessary, the crossing of cables should be spaced and agreed so that, timely and economical repairs to both the crossing and crossed cables can be undertaken.	It is noted that the Isle of Man Interconnector is 4.6km (c.2.5nm) to the north of the Project windfarm site and as such there is no expected direct interaction with the Isle of Man interconnector. These comments may be more relevant to the Morgan Offshore Wind Project Generation Assets. Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14). Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14).
MOR_031_070_020 623	7 Potential Design/Construction Conflict Several options for future interconnection, via a second sub-sea Low At present these plans and options are still in the high level feasibility stage but it is considered appropriate to interconnector cable, between IOM & UK are currently being considered with one potential off-shore cable route/corridor running to the south of the proposed Morecambe Windfarm and landing south of Blackpool. highlight and share our plans for information purposes at this time. As more	It is noted that the Isle of Man Interconnector is 4.6km (c.2.5nm) to the north of the Project windfarm site and as such there is no expected direct interaction with the Isle of Man interconnector. These comments may be more relevant to the Morgan Offshore Wind Project Generation Assets. Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14). Increased vessel traffic in the area is noted and considered as part of Chapter 14 Shipping and Navigation (Document Reference 5.1.14).

Unique Reference Identifier	Consultation response received	Applicant response
	<p>information becomes available Manx Utilities will be able provide more information as appropriate.</p> <p>[1] MCC considered it appropriate for the developer to engage as soon as reasonably practicable with MCC to commence discussions on the potential requirements for crossing and proximity agreements, associated with export cables/infrastructure, to minimise issues/delays as the project progresses.</p>	
MOR_031_071_020 623	<p>Chapter 18 SLIVA</p> <p>The exact layout of each Project's infrastructure is still being developed and will not be finalised until the Project has been granted consent by the Planning Inspectorate and Secretary of State for the Department for Energy Security and Net Zero. Due to the complexity of the Project, many details will likely remain unknown to us at the time of submitting our application, including the:</p> <ul style="list-style-type: none"> · Precise number, location and configuration of the wind turbine generators (WTGs), offshore substation platforms (OSPs) and any associated development. · Type of foundation to install the turbines and any associated development. · Exact height of the tip of the turbine rotors and the diameter of the rotors <p>The work has been undertaken in accordance with accepted industry guidance (SLIVA). Whilst there are some points of detail that may merit further scrutiny/debate, which is often the case when judgement is involved, generally the findings are concurred with. They are all based on worst case scenarios. The preliminary SLIVA's establish that there will be no significant effects on seascape, landscape or visual receptors. Due to long distance, the large scale of the associated seascape and the presence of existing operational offshore windfarms. While they will be visible on the eastern horizon it is in the context of an expansive seascape with the presence of existing operational offshore windfarms.</p>	<p>The Applicant notes your response. Transboundary effects of the Project on seascape, landscape and visual receptors on the Isle of Man is scoped out of the SLVIA due to the Isle of Man being located outside the SLVIA study area, approximately 65km from the Project windfarm site. There is no potential for significant effects at such a range and given the presence of existing operational offshore windfarms in the intervening seascape.</p>
MOR_031_072_020 623	<p>Chapter 20 Socio-Economics, Tourism and Recreation</p> <p>Compiled by DfE, Treasury, with review of draft SPCO comments.</p> <p>General Observations: Of the three windfarms (Mona, Morgan, Morecambe), the Mona and Morgan arrays seem to represent the biggest economic risk to the Island. This is particularly the case when the multiple windfarm developments are looked at as a whole. This also includes existing windfarms (such as West of Duddon Sands) and the potential for developments within Isle of Man waters. There would appear to be limited commentary in the consultation Documents on the economic impacts on the Island. It is noted that the Morgan Document PEIR 2.20 only covers the potential impacts of views of the windfarm from the Isle of Man, not the much more substantial economic effects on lifeline services.</p>	<p>To understand potential impacts to tourism, the Applicant drew the assessment on a range of publicly available statistics for the local study area as well as the UK as a whole.</p> <p>The tourism economy across the Local Economic Area is varied with multiple markets and assets which attract visitors. The overall assessment found the Project is expected to have no significant effects on the tourism economy and recreational activities.</p> <p>Further information on our assessments can be found in Chapter 20: Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_031_073_020 623	<p>Economic Impacts – Lifeline Services</p> <ul style="list-style-type: none"> · It is noted that SPCO have highlighted a number of apparently material inaccuracies in the consultation Documents in relation to the frequency, importance, and expected impact of the developments on SPCO operations (and therefore the impact on the Island). · As a small Island nation, the Isle of Man is largely dependent on the import of goods. This includes time-critical deliveries such as food, medical supplies, chemicals, as well as construction supplies, durable goods, and many others. Any disruption of time-critical lifeline goods can have wider social impacts on the Island. The most obvious impact from a resident’s perspective is in instances where there are multiple disrupted days’ sailings, which can lead to shortages in shops and panic buying in some instances. This effect is likely materially different and proportionally much larger compared to a UK-Ireland service, for example. Wider impacts include general costs to businesses in terms of delayed imports/exports. The Island is at a competitive disadvantage in terms of transit times for goods and these issues would be exacerbated by an increase in delays/cancellations. This is particularly relevant in relation to seafood / agricultural export, manufacturing, and engineering sectors of the economy. There is only one other sea freight provider supplying the Island (Mezeron) and this operates at a substantially smaller scale than the SPCO. As a result and disruption to SPCO would be of proportionally much greater magnitude to the Isle of Man’s economic and social wellbeing compared to routes where alternatives are available. As noted by SPCO, the ferry service runs on a tight schedule with limited ability to make up time. For this reason, even fairly small increases in transit time would be expected to lead to a general increase in cancellations. 	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>
MOR_031_074_020 623	<p>Economic Impacts – Resident Travel</p> <ul style="list-style-type: none"> · It is noted that the developments (especially in combination) will adversely affect journey times. This would have an economic cost to Island residents travelling via sea. In situations where longer delays or cancellations occur due to the impact of the developments, these would be exacerbated. Additional economic costs imposed on residents harms the Island’s attractiveness as a place to live and work, though quantifying this effect is not possible. Economic Impacts – Non-Resident Travel & Tourism · It is noted from SPCO’s comments that the Liverpool services are particularly vulnerable to disruption in the Spring and Autumn due to weather and the need to avoid the developments. If cancellations occurred during ‘peak’ travel periods, this could lead to significant impact with a lack of capacity on alternative sailings; o During super peak periods (i.e. TT / MGP), this could lead to passengers being 	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>delayed by extended periods (potentially days as other sailings are full);o If visiting passengers travelling from the IoM were impacted, again during peak periods this could lead to a logistical challenge to accommodate people on Island, with accommodation providers potentially already being at capacity. There is precedent here when air and sea services have been disrupted and a civil contingency plan has been required to provide emergency overnight accommodation.· The Consultation Documents appear to speak in general terms with sailings averaged across the year, which does not reflect the very large peaks in traffic at particular points in the year, which would be severely impacted by any disruption. For example, while there are limited winter Liverpool sailings, the summer/TT sailings can be extremely busy.· As with residents, additional economic costs (quantity unknown) would be borne by visitors to the Island, which would ultimately make the Island a less attractive place to visit to some degree.</p>	<p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA</p> <p>Disruption of ferry operations and potential impacts have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>
MOR_031_075_020 623	<p>Chapter 21 Climate Change</p> <ul style="list-style-type: none"> · The PEIR report is comprehensive and ties in to UK National Planning policy, plus energy and climate policy. · The GHG emissions are clearly stated across each stage, construction, operation and decommissioning · The whole-life avoided-emissions are clearly stated and show that the developments, despite being emitters, are positive for overall global emissions when comparing them to fossil fuels · Adaptation risks have been considered. · The PEIR report is a fair and reasonable assessment. · In addition, noting the concerns regarding the potential effects on shipping and navigation route as a result of this proposed development; from a climate change point of view the shipping and navigation section seems to be well assessed, and since ferries are by far the lowest emitting way to travel to and from the Island, it is very important that these routes are not significantly affected by this development proposal. 	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA</p>

Unique Reference Identifier	Consultation response received	Applicant response
		Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the GHG emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.
MOR_031_076_020 623	<p>General comments from Manx National Heritage (MNH): MNH would expect that the forthcoming EIA would consider the following issues: An EIA would need to contemplate the following issues: Visual impact of proposals on the setting of protected monuments on the east side of the watershed of the Island, is estimated at approximately 25 monuments. However, given the significantly longer distance involved, this impact may be limited. Moreover, there remain some flagship sites such as Castle Rushen and Laxey Wheel which are major tourist assets of national and economic significance to the Island where the impact would need to be considered more holistically. The potential direct impact on historical shipwrecks would also need to be assessed. MNH has recently acquired some shipwreck data and whilst this is still being evaluated and integrating it into MNH data system however it would appear that this data we have does not extend as far as the Morecambe development site. The developer would have to consult other sources in England.</p> <p>MNH can provide the developer with access to this data upon request. In addition, MNH provides the following general comments: · The need for protection of the seabed with particular reference to areas of high conservation or carbon sequestration value, such as sea grass beds, <i>Zostera marina</i>, as highlighted in the Manx Marine Nature Reserves. · Protection of sensitive coastal areas such as Dhoon, Laxey and Maughold headlands which are noted for their nesting sea bird communities. · Protection of the seabed from scour and silt during the positioning of rock berms and trench digging and removing boulders. · Limiting noise pollution as cetaceans are regularly recorded between Ramsey and Laxey Bays. · Limiting disturbance of marine species and coastal sea birds during any boat trips from the Island to the arrays, as and where necessary.</p>	<p>The Applicant notes your response, with a settings assessment provided as part of the DCO Application, considering visual effects on potentially impacted heritage assets. Given the distance between the Project and the Isle of Man, the Isle of Man is located outside of the setting assessment study area, with no potential significant effects at such a long range.</p> <p>It is noted that there would be no direct effects in the Isle of Man waters and therefore include English data sets only.</p>
MOR_032_001_020 623	We write on behalf of our client, Ørsted Burbo (UK) Limited, the operator of the Burbo Bank Wind Farm (“Burbo Bank”) in response to your notification of a proposed application for a development consent order (“DCO”) under section 48 of the Planning Act 2008 in relation to the Morecambe Offshore Windfarm Generation Assets project (“Morecambe Offshore Wind Project”). We write to register with you our interest in your proposal and in particular areas of potential interaction between your proposed development and Burbo Bank. Our response at this stage is based on Documents currently made available regarding your project and our response will likely develop as more information is made available including during application and examination stage and	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>as we further consider the potential interaction between the projects. We are also engaging on the proposed Mona and Morgan wind farms and intend also to engage on the proposed Morgan and Morecambe Transmission Assets during statutory consultation.</p>	
<p>MOR_032_002_020 623</p>	<p>Introduction: Interaction between Burbo Bank and the Morecambe Offshore Wind Project Burbo Bank Burbo Bank is an operational offshore wind farm with capacity of 90 MW and 25 wind turbine generators. Burbo Bank holds a lease from the Crown Estate and operates pursuant to the below consents. Burbo Bank is expected to continue to operate, be maintained, and may in due course be upgraded and repowered, and will at some stage be decommissioned. Thus any interactions and impact should be considered to be long-term and the various project stages of operation/maintenance, re-powering and decommissioning should be taken into account by the Morecambe Offshore Wind Project. In addition, it is important that during the long-term interaction of the projects, the Burbo Bank consents (including consent conditions) and any stakeholder agreements entered into by Burbo Bank is not adversely affected. Consent No. Consent Project Title Status Details N/A Section 36 Consent Burbo Bank Wind Farm Construction and Operation Operational Capacity of 90MW, 25 WTGs L/2014/00348 Marine Licence Cable repair Operational Repair of intra-array cables L/2018/00103 Marine Licence Cable repair Operational Repair of export cables. L/2016/00296 Marine Licence Operations and Maintenance activities Operational Removal of marine growth and/or guano, Replacement of corrosion protection anodes, Application of paint or other coatings, Modifications to Jtubes, Replacement of access ladders -</p>	<p>The Applicant notes your response.</p> <p>Consideration of potential impacts to existing infrastructure, including Burbo Bank, has been assessed within relevant chapters of the Environmental Statement, as appropriate.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>major component replacement. L/2022/00397 Marine Licence Bird deterrents Operational Installation of varying bird deterrent technologies. EIA/2023/00017 Marine Licence Improvement works Screening (preapplication) Addition of blade extensions to each turbine blade. Proximity The Morecambe Offshore Wind Project array area is expected to be 33.38km from Burbo Bank.</p>	
<p>MOR_032_003_020 623</p>	<p>Effect on energy yield of Burbo Bank As set out, the proposed Morecambe Offshore Wind Project array is 33.38km away from Burbo Bank. Due to this proximity, there is the potential for the Morecambe Offshore Wind Project turbines to interfere with wind speed or wind direction of Burbo Bank and thus cause a reduction in energy output from the Burbo Bank turbines. This requires to be properly assessed, appropriate mitigation applied with any remaining adverse effects appropriately compensated.</p>	<p>The Applicant has engaged with the developers of operational windfarms (Ørsted), noting the items raised and would maintain engagement moving forward. Consideration of wake effects are presented in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).</p>
<p>MOR_032_004_020 623</p>	<p>Navigation and shipping The area of the proposed Morecambe Offshore Wind Project has significant amounts of existing shipping activity. The information provided in the PEIR is not clear on the extent to which and the location within which vessel activity would increase during both the construction and operational phases. Given there is no information currently available on vessel routes or proposed construction or O+M ports, it is difficult to understand the potential risks to assets associated with the generation and transmission of electricity from Burbo Bank. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed. It is important that any solutions properly take into account existing consent conditions and agreements. We would also appreciate being given the opportunity to input into and participate in discussions around Navigation risks (including issues of search and rescue lanes and vessel traffic service) and mitigations.</p>	<p>Meetings have been undertaken with existing Irish Sea offshore windfarm developers to discuss the Project. Additionally, Orsted attended the Marine Navigation Engagement Forum (MNEF) and Navigation Risk Assessment (NRA)/ Cumulative Regional NRA hazard workshops. Details of the Project components and estimated vessel movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_032_005_020 623	Physical interaction of projects. It is very important that Burbo Bank and its associated transmission assets can at all times be accessed to allow for appropriate Operation and Maintenance work and, in due course, upgrading, re-powering and decommissioning activities. It would therefore be useful to understand all of the Morecambe Offshore Wind Project components and routes associated with the proposed works (including proposed transmission works) so that we can establish that access for Burbo Bank, including access for jack-up vessels and anchor spays Page 3D2804.45 1005730954 1 SM(etc.), will be maintained and that physical interactions can be avoided, or understood and appropriately mitigated	The Applicant has engaged with the developers of operational windfarms, including Ørsted, noting the items raised and will maintain engagement moving forward. Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.
MOR_032_006_020 623	Helicopter activity It is difficult to quantify the level of impact helicopter usage during the construction and operation of the Morecambe Offshore Wind Project. No heliport site(s) or transit route(s) have been identified within the PEIR Documentation. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed.	Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is anticipated that during the construction and operation and maintenance phases helicopters would route from Blackpool Airport or Liverpool Airport, however this is indicative at this stage and subject to change. A meeting was held between Ørsted and the Applicant on the 25 October 2023 noting that further information would be provided when developed post- consent.
MOR_032_007_020 623	Emergency response We would be happy to discuss with you appropriate communication and collaboration between Burbo Bank, Morecambe Offshore Wind Project, and other nearby offshore wind developments in circumstances where emergency responses are required, for example in the event of accidents or pollution spills.	The Applicant notes your response. An Emergency Response and Cooperation Plan (ERCoP) would be drafted post-consent and lines of communications have been established with the Applicant and existing operational windfarms in the region.
MOR_032_008_020 623	Cumulative and in-combination effects of projects It is important to ensure that all environmental impacts of your project are properly and fully assessed including any potential cumulative or in combination effects with Burbo Bank. As an example, the impact upon Whooper Swan has been the subject of studies in relation to Burbo Bank and these studies have shown Whooper Swan transits through or close to your proposed development. Your Offshore Ornithology chapters has low confidence in the predicted impacts upon Whooper Swan. We would be happy to discuss with you the Whooper Swan studies, and your approach to potential cumulative or in combination effects generally, in order to help ensure a compliant assessment.	Cumulative and in-combination effects are considered and presented in Chapter 11 Marine Mammals (Document Reference 5.1.11), Chapter 14 Shipping and Navigation (Document Reference 5.1.14), Chapter 12 Offshore Ornithology (Document Reference 5.1.12), Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7) and Chapter 9 Benthic Ecology (Document Reference 5.1.9) The Applicant notes your comment on future discussions on the cumulative and in-combination impacts listed.
MOR_033_001_020 623	We write on behalf of our client, Burbo Extension Ltd, the operator of the Burbo Bank Extension Wind Farm ("Burbo Bank Extension") in response to your notification of a proposed application for a development consent order ("DCO") under section 48 of the Planning Act 2008 in relation to the Morecambe Offshore Windfarm Generation Assets project ("Morecambe Offshore Wind Project"). We write to register with you our interest in your proposal and in particular areas of potential interaction between your proposed development and Burbo	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Bank Extension. Our response at this stage is based on Documents currently made available regarding your project and our response will likely develop as more information is made available including during application and examination stage and as we further consider the potential interaction between the projects. We are also engaging on the proposed Mona and Morgan wind farms and intend also to engage on the proposed Morgan and Morecambe Transmission Assets during statutory consultation.</p>	
<p>MOR_033_002_020 623</p>	<p>Introduction: Interaction between Burbo Bank Extension and the Morecambe Offshore Wind Project Burbo Bank Extension Burbo Bank Extension is an operational offshore wind farm with capacity of 258 MW and 32 wind turbine generators. Burbo Bank Extension holds a lease from the Crown Estate and operates pursuant to the below consents. Burbo Bank Extension is expected to continue to operate, be maintained, and may in due course be upgraded and repowered, and will at some stage be decommissioned. Thus any interactions and impact should be considered to be long-term and the various project stages of operation/maintenance, re-powering and decommissioning should be taken into account by the Morecambe Offshore Wind Project. In addition, it is important that during the long-term interaction of the projects, the Burbo Bank Extension consents (including consent conditions) and any stakeholder agreements entered into by Burbo Bank Extension is not adversely affected.</p> <p>Consent No. Consent Project Title Status Details N/A Development Consent Order Burbo Bank Extension Wind Farm Construction, Operations and Maintenance. Operational Capacity of 258 MW, 32 WTGs Removal of marine growth and/or guano, Replacement of corrosion protection anodes, Application of paint or other coatings, Modifications to J-tubes, Replacement of access ladders - major component replacement. L/2017/00296 Marine Licence Cable repair Operational Repair of intra-array cables Proximity The Morecambe Offshore Wind Project array area is expected to be 29.14km from Burbo Bank Extension.</p>	<p>The Applicant notes your response.</p> <p>Consideration of potential impacts to existing infrastructure, including Burbo Bank Extension, has been assessed within relevant chapters of the Environmental Statement, as appropriate.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_033_003_020 623	<p>Effect on energy yield of Burbo Bank Extension</p> <p>As set out, the proposed Morecambe Offshore Wind Project array is 29.14km away from Burbo Bank Extension. Due to this proximity, there is the potential for the Morecambe Offshore Wind Project turbines to interfere with wind speed or wind direction of Burbo Bank Extension and thus cause a reduction in energy output from the Burbo Bank Extension turbines. This requires to be properly assessed, appropriate mitigation applied with any remaining adverse effects appropriately compensated.</p>	<p>The Applicant has engaged with the developers of operational windfarms (Ørsted), noting the items raised and would maintain engagement moving forward.</p> <p>Consideration of wake effects are presented in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).</p>
MOR_033_004_020 623	<p>Navigation and shipping</p> <p>The area of the proposed Morecambe Offshore Wind Project has significant amounts of existing shipping activity. The information provided in the PEIR is not clear on the extent to which and the location within which vessel activity would increase during both the construction and operational phases. Given there is no information currently available on vessel routes or proposed construction or O+M ports, it is difficult to understand the potential risks to assets associated with the generation and transmission of electricity from Burbo Bank Extension. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed. It is important that any solutions properly take into account existing consent conditions and agreements. We would also appreciate being given the opportunity to input into and participate in discussions around Navigation risks (including issues of search and rescue lanes and vessel traffic service) and mitigations.</p>	<p>Meetings have been undertaken with existing Irish Sea offshore windfarm developers to discuss the Project. Additionally, Orsted attended the Marine Navigation Engagement Forum (MNEF) and Navigation Risk Assessment (NRA)/ Cumulative Regional NRA hazard workshops.</p> <p>Details of the Project components and estimated vessel movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>
MOR_033_005_020 623	<p>Physical interaction of projects</p> <p>It is very important that Burbo Bank Extension and its associated transmission assets can at all times be accessed to allow for appropriate Operation and Maintenance work and, in due course, upgrading, re-powering and decommissioning activities. It would therefore be useful to understand all of the Morecambe Offshore Wind Project components and routes associated with the proposed works (including proposed transmission works) so that we can establish that access for Burbo Bank Extension, including access for jack-up vessels and anchor splays (etc.), will be maintained and that physical interactions can be avoided, or understood and appropriately mitigated.</p>	<p>The Applicant has engaged with the developers of operational windfarms, including Ørsted, noting the items raised and will maintain engagement moving forward.</p> <p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>
MOR_033_006_020 623	<p>Helicopter activity</p> <p>It is difficult to quantify the level of impact helicopter usage during the construction and operation of the Morecambe Offshore Wind Project. No heliport site(s) or transit route(s) have been identified within the PEIR Documentation. Page 3D2804.45 1005730963 1 SM</p> <p>We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed.</p>	<p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is anticipated that during the construction and operation and maintenance phases helicopters would route from Blackpool Airport or Liverpool Airport, however this is indicative at this stage and subject to change.</p> <p>A meeting was held between Ørsted and the Applicant on the 25 October 2023 noting that further information would be provided when developed post- consent.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_033_007_020 623	<p>Emergency response</p> <p>We would be happy to discuss with you appropriate communication and collaboration between Burbo Bank Extension, Morecambe Offshore Wind Project, and other nearby offshore wind developments in circumstances where emergency responses are required, for example in the event of accidents or pollution spills.</p>	<p>The Applicant notes your response. An Emergency Response and Cooperation Plan (ERCoP) would be drafted post-consent and lines of communications have been established with the Applicant and existing operational windfarms in the region.</p>
MOR_033_008_020 623	<p>Cumulative and in-combination effects of projects</p> <p>It is important to ensure that all environmental impacts of your project are properly and fully assessed including any potential cumulative or in combination effects with Burbo Bank Extension. As an example, the impact upon Whooper Swan has been the subject of studies in relation to Burbo Bank Extension and these studies have shown Whooper Swan transits through or close to your proposed development. Your Offshore Ornithology chapters has low confidence in the predicted impacts upon Whooper Swan. We would be happy to discuss with you the Whooper Swan studies, and your approach to potential cumulative or in combination effects generally, in order to help ensure a compliant assessment.</p>	<p>Cumulative and in-combination effects are considered and presented in Chapter 11 Marine Mammals (Document Reference 5.1.11), Chapter 14 Shipping and Navigation (Document Reference 5.1.14), Chapter 12 Offshore Ornithology (Document Reference 5.1.12), Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7) and Chapter 9 Benthic Ecology (Document Reference 5.1.9)</p> <p>The Applicant notes your comment on future discussions on the cumulative and in-combination impacts listed.</p>
MOR_033_009_020 623	<p>Radar</p> <p>We would like to understand better from you your proposed radar mitigation solutions to ensure that they do not adversely affect the solutions currently in place for Burbo Bank Extension</p>	<p>Proposed radar mitigation solutions, as they are further detailed, would consider the possibility of potential adverse effects on existing solutions, as identified in Section 16.5 in Chapter 16 Civil Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).</p>
MOR_034_001_020 623	<p>Dear Morecombe Offshore Windfarm Project Team,</p> <p>Thank you for sharing this consultation opportunity with SFF. Hereby, SFF file a 'nil response' on this consultation.</p>	<p>The Applicant notes your response.</p>
MOR_035_001_020 623	<p>We write on behalf of our client, Walney (UK) Offshore Windfarms Limited, the operator of Walney 1 and 2 windfarms ("Walney 1 and 2"), in response to your notification of a proposed application for a development consent order ("DCO") under section 48 of the Planning Act 2008 in relation to the Morecambe Offshore Windfarm Generation Assets project ("Morecambe Offshore Wind Project"). We write to register with you our interest in your proposal and in particular areas of potential interaction between your proposed development and Walney 1 and 2. Our response at this stage is based on Documents currently made available regarding your project and our response will likely develop as more information is made available including during application and examination stage and as we further consider the potential interaction between the projects. We are also engaging on the proposed Mona and Morgan wind farms and intend also to engage on the proposed Morgan and Morecambe Transmission Assets during statutory consultation.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_035_002_020 623	<p>Introduction: Interaction between Walney 1 and 2 and the Morecambe Offshore Wind Project Walney 1 and 2</p> <p>Walney 1 and 2 are operational offshore wind farms with combined capacity of 367 MW and 102 wind turbine generators. Walney 1 and 2 hold a lease from the Crown Estate and operate pursuant to the below consents. Walney 1 and 2 are expected to continue to operate, be maintained, and may in due course be upgraded and repowered, and will at some stage be decommissioned. Thus any interactions and impact should be considered to be long-term and the various project stages of operation/maintenance, re-powering and decommissioning should be taken into account by the Morecambe Offshore Wind Project. In addition, it is important that during the long-term interaction of the projects, the Walney 1 and 2 consents (including consent conditions) and any stakeholder agreements entered into by Walney 1 and 2 are not adversely affected. Consent No. Consent Project Title Status Details N/A Section 36</p> <p>Consent Walney 1&2 Wind Farms Construction and Operation Operational Capacity of 367 MW, 102 WTGs L/2011/00067 Marine Licence Walney 1&2 Wind Farms Construction and Operation. Operational Capacity of 367 MW, 102 WTGs L/2014/00023 Marine Licence Cable repair Operational Repair of intra-array cables L/2016/00298 Marine Licence Operations and Maintenance activities Operational Removal of marine growth and/or guano, Replacement of corrosion protection anodes, Application of paint or other coatings, Modifications to J-tubes, Replacement of access ladders - major component replacement. Proximity The Morecambe Offshore Wind Project array area is expected to be</p>	<p>The Applicant notes your response.</p> <p>Consideration of potential impacts to existing infrastructure, including Walney 1 and 2, has been assessed within relevant chapters of the Environmental Statement, as appropriate.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	20.26km and 22.14km from Walney 1 and 2 respectively.	
MOR_035_003_020 623	Effect on energy yield of Walney 1 and 2 As set out, the proposed Morecambe Offshore Wind Project array is 20.26km and 22.14km away from Walney 1 and 2 respectively. Due to this proximity, there is the potential for the Morecambe Offshore Wind Project turbines to interfere with wind speed or wind direction of Walney 1 and 2 and thus cause a reduction in energy output from the Walney 1 and 2 turbines. This requires to be properly assessed, appropriate mitigation applied with any remaining adverse effects appropriately compensated	The Applicant has engaged with the developers of operational windfarms (Ørsted), noting the items raised and would maintain engagement moving forward. Consideration of wake effects are presented in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_035_004_020 623	<p>Navigation and shipping</p> <p>The area of the proposed Morecambe Offshore Wind Project has significant amounts of existing shipping activity. The information provided in the PEIR is not clear on the extent to which and the location within which vessel activity would increase during both the construction and operational phases. Given there is no information currently available on vessel routes or proposed construction or O+M ports, it is difficult to understand the potential risks to assets associated with the generation and transmission of electricity from Walney 1 and 2. It is noted that specific information about wind farm service vessels (“WFSVs”) are provided in the PEIR including that there were a 158 WFSV transits per year passing “north/south between Liverpool and the offshore windfarms to the north”, “21 of these tracks passed within 1nm of the north-eastern corner of the wind farm site”. Windfarms to the north appear to include Walney 1 and 2. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed. It is important that any solutions properly take into account existing consent conditions and agreements. We would also appreciate being given the opportunity to input into and participate in discussions around Navigation risks (including issues of search and rescue lanes and vessel traffic service) and mitigations.</p>	<p>Meetings have been undertaken with existing Irish Sea offshore windfarm developers to discuss the Project. Additionally, Orsted attended the Marine Navigation Engagement Forum (MNEF) and Navigation Risk Assessment (NRA)/ Cumulative Regional NRA hazard workshops.</p> <p>Details of the Project components and estimated vessel movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>
MOR_035_005_020 623	<p>Physical interaction of projects - It is very important that Walney 1 and 2 and its associated transmission assets can at all times be accessed to allow for appropriate Operation and Maintenance work and, in due course, upgrading, re-powering and decommissioning activities. It would therefore be useful to understand all of the Morecambe Offshore Wind Project components and routes associated with the proposed works (including proposed transmission works) so that we can establish that access for Walney 1 and 2, including access for jack-up vessels and anchor splays (etc.), will be maintained and that physical interactions can be avoided, or understood and appropriately mitigated.</p>	<p>The Applicant has engaged with the developers of operational windfarms, including Ørsted, noting the items raised and will maintain engagement moving forward.</p> <p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>
MOR_035_006_020 623	<p>Helicopter activity</p> <p>It is difficult to quantify the level of impact helicopter usage during the construction and operation of the Morecambe Offshore Wind Project. No heliport site(s) or transit route(s) have been identified within the PEIR Documentation. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed.</p>	<p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is anticipated that during the construction and operation and maintenance phases helicopters would route from Blackpool Airport or Liverpool Airport, however this is indicative at this stage and subject to change.</p> <p>A meeting was held between Ørsted and the Applicant on the 25 October 2023 noting that further information would be provided when developed post-consent.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_035_007_020 623	<p>Emergency response</p> <p>We would be happy to discuss with you appropriate communication and collaboration between Walney 1 and 2, Morecambe Offshore Wind Project, and other nearby offshore wind developments in circumstances where emergency responses are required, for example in the event of accidents or pollution spills.</p>	<p>The Applicant notes your response. An Emergency Response and Cooperation Plan (ERCoP) would be drafted post-consent and lines of communications have been established with the Applicant and existing operational windfarms in the region.</p>
MOR_035_008_020 623	<p>Cumulative and in-combination effects of projects</p> <p>It is important to ensure that all environmental impacts of your project are properly and fully assessed including any potential cumulative or in combination effects with Walney 1 and 2. As an example, the impact upon Whooper Swan has been the subject of studies in relation to Walney 1 and 2 and these studies have shown Whooper Swan transits through or close to your proposed development. Your Offshore Ornithology chapters has low confidence in the predicted impacts upon Whooper Swan. We would be happy to discuss with you the Whooper Swan studies, and your approach to potential cumulative or in combination effects generally, in order to help ensure a compliant assessment.</p>	<p>Cumulative and in-combination effects are considered and presented in Chapter 11 Marine Mammals (Document Reference 5.1.11), Chapter 14 Shipping and Navigation (Document Reference 5.1.14), Chapter 12 Offshore Ornithology (Document Reference 5.1.12), Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7) and Chapter 9 Benthic Ecology (Document Reference 5.1.9)</p> <p>The Applicant notes your comment on future discussions on the cumulative and in-combination impacts listed.</p>
MOR_036_001_020 623	<p>Section 48 Consultation Response</p> <p>We write on behalf of our client, Walney Extension Limited, the operator of the Walney Extension windfarm comprising Walney 3 and 4 (“Walney 3 and 4”), in response to your notification of a proposed application for a development consent order (“DCO”) under section 48 of the Planning Act 2008 in relation to the Morecambe Offshore Windfarm Generation Assets project (“Morecambe Offshore Wind Project”). We write to register with you our interest in your proposal and in particular areas of potential interaction between your proposed development and Walney 3 and 4. Our response at this stage is based on Documents currently made available regarding your project and our response will likely develop as more information is made available including during application and examination stage and as we further consider the potential interaction between the projects. We are also engaging on the proposed Mona and Morgan wind farms and intend also to engage on the proposed Morgan and Morecambe Transmission Assets during statutory consultation.</p>	<p>The Applicant notes your response.</p>
MOR_036_002_020 623	<p>Introduction: Interaction between Walney 3 and 4 and the Morecambe Offshore Wind Project Walney 3 and 4 Walney 3 and 4 are operational offshore wind farms with combined capacity of 660 MW and 87 wind turbine generators. Walney 3 and 4 hold a lease from the Crown Estate and operate pursuant to the below consents. Walney 3 and 4 are expected to continue to operate, be maintained, and may in due course be upgraded and repowered, and will at some stage be decommissioned. Thus any interactions and impact should be considered to be long-term and the various project stages of</p>	<p>The Applicant notes your response.</p> <p>Consideration of potential impacts to existing infrastructure, including Walney 3 and 4, has been assessed within relevant chapters of the Environmental Statement, as appropriate.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>operation/maintenance, re-powering and decommissioning should be taken into account by the Morecambe Offshore Wind Project. In addition, it is important that during the long-term interaction of the projects, the Walney 3 and 4 consents (including consent conditions) and any stakeholder agreements entered into by Walney 3 and 4 are not adversely affected. Consent No. Consent Project Title Status Details</p> <p>N/A Development Consent Order Walney 3 and 4 Wind farm construction, operation and maintenance</p> <p>Operational Capacity of 660 MW and 87 WTGs.</p> <p>Removal of marine growth and/or guano, Replacement of corrosion protection anodes, Application of paint or other coatings, Modifications to Jtubes, Replacement of access ladders - major component replacement.</p> <p>L/2019/0003</p> <p>7</p> <p>Marine Licence Walney Extension</p> <p>Pontoon and lead-in jetty (maintenance)</p> <p>Dredge and Disposal Licence (Barrow D). Operational 24,000 m3 per annum</p> <p>EIA/2023/00</p> <p>015</p> <p>Marine Licence Improvement works Screening preapplication</p> <p>Addition of blade extensions to each turbine blade.</p> <p>Proximity</p> <p>The Morecambe Offshore Wind Project array area is expected to be 26.37km and 18.43km from Walney 3 and 4 respectively.</p>	
MOR_036_003_020 623	<p>Effect on energy yield of Walney 3 and 4</p> <p>As set out, the proposed Morecambe Offshore Wind Project array is 26.37km and 18.43km away from Walney 3 and 4 respectively. Due to this proximity, there is the potential for the Morecambe Offshore Wind Project turbines to interfere with wind speed or wind direction of Walney 3 and 4 and thus cause a reduction in energy output from the Walney 3 and 4 turbines. This requires to be properly assessed, appropriate</p>	<p>The Applicant has engaged with the developers of operational windfarms (Ørsted and Scottish Power Renewables), noting the items raised and would maintain engagement moving forward.</p> <p>Consideration of wake effects are presented in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	mitigation applied with any remaining adverse effects appropriately compensated	
MOR_036_004_020 623	<p>Navigation and shipping</p> <p>The area of the proposed Morecambe Offshore Wind Project has significant amounts of existing shipping activity. The information provided in the PEIR is not clear on the extent to which and the location within which vessel activity would increase during both the construction and operational phases. Given there is no information currently available on vessel routes or proposed construction or O+M ports, it is difficult to understand the potential risks to assets associated with the generation and transmission of electricity from Walney 3 and 4. It is noted that specific information about wind farm service vessels (“WFSVs”) are provided in the PEIR including that WFSVs crossed through the Morecambe windfarm site 18 times between Liverpool and Walney 3 and 4 in 2019.</p> <p>We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed. It is important that any solutions properly take into account existing consent conditions and agreements. We would also appreciate being given the opportunity to input into and participate in discussions around Navigation risks (including issues of search and rescue lanes and vessel traffic service) and mitigations</p>	<p>Meetings have been undertaken with existing Irish Sea offshore windfarm developers to discuss the Project. Additionally, Orsted attended the Marine Navigation Engagement Forum (MNEF) and Navigation Risk Assessment (NRA)/ Cumulative Regional NRA hazard workshops.</p> <p>Details of the Project components and estimated vessel movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>
MOR_036_005_020 623	<p>Physical interaction of projects</p> <p>It is very important that Walney 3 and 4 and its associated transmission assets can at all times be accessed to allow for appropriate Operation and Maintenance work and, in due course, upgrading, re-powering and decommissioning activities. It would therefore be useful to understand all of the Morecambe Offshore Wind Project components and routes associated with the proposed works (including proposed transmission works) so that we can establish that access for Walney 3 and 4, including access for jack-up vessels and anchor splays (etc.), will be maintained and that physical interactions can be avoided, or understood and appropriately mitigated.</p>	<p>The Applicant has engaged with the developers of operational windfarms, including Ørsted, noting the items raised and will maintain engagement moving forward.</p> <p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>
MOR_036_006_020 623	<p>Helicopter activity</p> <p>It is difficult to quantify the level of impact helicopter usage during the construction and operation of the Morecambe Offshore Wind Project. No heliport site(s) or transit route(s) have been identified within the PEIR Documentation. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed.</p>	<p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is anticipated that during the construction and operation and maintenance phases helicopters would route from Blackpool Airport or Liverpool Airport, however this is indicative at this stage and subject to change.</p> <p>A meeting was held between Ørsted and the Applicant on the 25 October 2023 noting that further information would be provided when developed post- consent.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_036_007_020 623	<p>Emergency response</p> <p>We would be happy to discuss with you appropriate communication and collaboration between Walney 3 and 4, Morecambe Offshore Wind Project, and other nearby offshore wind developments in circumstances where emergency responses are required, for example in the event of accidents or pollution spills. Cumulative and in-combination effects of projects It is important to ensure that all environmental impacts of your project are properly and fully assessed including any potential cumulative or in combination effects with Walney 3 and 4. As an example, the impact upon Whooper Swan has been the subject of studies in relation to Walney 3 and 4 and these studies have shown Whooper Swan transits through or close to your proposed development. Your Offshore Ornithology chapters has low confidence in the predicted impacts upon Whooper Swan. We would be happy to discuss with you the Whooper Swan studies, and your approach to potential cumulative or in combination effects generally, in order to help ensure a compliant assessment</p>	<p>The Applicant notes your response. An Emergency Response and Cooperation Plan (ERCoP) would be drafted post-consent and lines of communications have been established with the Applicant and existing operational windfarms in the region.</p>
MOR_036_008_020 623	<p>Radar</p> <p>We would like to understand better from you your proposed radar mitigation solutions to ensure that they do not adversely affect the solutions currently in place for Walney 3 and 4.</p>	<p>Proposed radar mitigation solutions, as they are further detailed, would consider the possibility of potential adverse effects on existing solutions, as identified in Section 16.5 in Chapter 16 Civil Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).</p>
MOR_037_001_020 623	<p>We write on behalf of Orsted Isle of Man (UK) Limited (“Orsted”) the developer of the proposed Isle of Man Offshore Windfarm, in response to your notification of a proposed application for a development consent order (“DCO”) under section 48 of the Planning Act 2008. We write to register with you our interest in your proposal and in particular areas of potential interaction between your proposed development and the Isle of Man Offshore Windfarm. Our response at this stage is based on Documents currently made available regarding your project and our response will likely develop as more information is made available including during application and examination stage and as we further consider the potential interaction between the projects. Orsted has the benefit of an Agreement for Lease granted by the Isle of Man Government in 2015 and has conducted a number of environmental surveys and technical studies within the Isle of Mans Territorial Seas off the east coast to determine the feasibility of developing an offshore wind farm. These studies have determined the feasibility of the site. Orsted has progressed development and is currently working towards submitting a scoping report in September or October 2023, with an Application for Marine Infrastructure Consent currently anticipated to be made in Q1 2025. Any interactions and impact should be considered long-term and the various project stages of construction, operation, maintenance and decommissioning of the Isle of Man Offshore Windfarm should be considered by you. It is important to ensure that all environmental impacts of your project are properly and fully assessed</p>	<p>The Applicant notes your response.</p> <p>At the time of writing, limited information was available for the Mooir Vannin offshore wind farm. Where appropriate and where sufficient information was available to inform an assessment, the Mooir Vannin has been considered in the Environmental Statement.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>including any potential cumulative or in combination effects with the Isle of Man Offshore Windfarm. We refer you to our response to the Morgan Offshore Wind Project which outlines our concerns as to the approach taken to the in-combination and cumulative assessments to date. We would also expect consideration in your Report to Inform Appropriate Assessment. We look forward to being part of your continued meaningful engagement.</p>	
<p>MOR_038_001_020 623</p>	<p>We write on behalf of our client, Barrow Offshore Wind Limited, the operator of the Barrow Offshore Windfarm (“Barrow”) in response to your notification of a proposed application for a development consent order (“DCO”) under section 48 of the Planning Act 2008 in relation to the Morecambe Offshore Windfarm Generation Assets project (“Morecambe Offshore Wind Project”). We write to register with you our interest in your proposal and in particular areas of potential interaction between your proposed development and Barrow. Our response at this stage is based on Documents currently made available regarding your project and our response will likely develop as more information is made available including during application and examination stage and as we further consider the potential interaction between the projects. We are also engaging on the proposed Mona and Morgan wind farms and intend also to engage on the proposed Morgan and Morecambe Transmission Assets during statutory consultation.</p>	<p>The Applicant notes your response.</p>
<p>MOR_038_002_020 623</p>	<p>Introduction: Interaction between Barrow and the Morecambe Offshore Wind Project Barrow Barrow is an operational offshore wind farm with capacity of 90 MW and 30 wind turbine generators. Barrow holds a lease from the Crown Estate and operates pursuant to the below consents. Barrow is expected to continue to operate, be maintained, and may in due course be upgraded and repowered, and will at some stage be decommissioned. Thus any interactions and impact should be considered to be long term and the various project stages of operation/maintenance, re-powering and decommissioning should be taken into account by the Morecambe Offshore Wind Project. In addition, it is important that during the longterm interaction of the projects, the Barrow consents (including consent conditions) and any stakeholder agreements entered into by Barrow is not adversely affected. Consent No. Consent Project Title Status Details N/A Section 36 Consent Barrow Wind Farm Construction and Operation</p>	<p>The Applicant notes your response. Consideration of potential impacts to existing infrastructure, including Barrow has been assessed within relevant chapters of the Environmental Statement, as appropriate.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Operational Capacity of 90MW, 30 wind turbines</p> <p>L/2016/00297 Marine Licence Operations and Maintenance activities</p> <p>Operational Removal of marine growth and/or guano, Replacement of corrosion protection anodes, Application of paint or other coatings, Modifications to Jtubes, Replacement of access ladders - major component replacement.</p> <p>L/2014/00214 Marine Licence Cable repair Operational Repair of intra-array cables.</p> <p>Proximity</p> <p>The Morecambe Offshore Wind Project array area is expected to be 21.00km from Barrow.</p>	
MOR_038_003_020 623	<p>Effect on energy yield of Barrow</p> <p>As set out, the proposed Morecambe Offshore Wind Project array is 21.00km away from Barrow. Due to this proximity, there is the potential for the Morecambe Offshore Wind Project turbines to interfere with wind speed or wind direction of Barrow and thus cause a reduction in energy output from the Barrow turbines. This requires to be properly assessed, appropriate mitigation applied with any remaining adverse effects appropriately compensated.</p>	<p>The Applicant has engaged with the developers of operational windfarms (Ørsted), noting the items raised and would maintain engagement moving forward.</p> <p>Consideration of wake effects are presented in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_038_004_020 623	<p>Navigation and shipping</p> <p>The area of the proposed Morecambe Offshore Wind Project has significant amounts of existing shipping activity. The information provided in the PEIR is not clear on the extent to which and the location within which vessel activity would increase during both the construction and operational phases. Given there is no information currently available on vessel routes or proposed construction or O+M ports, it is difficult to understand the potential risks to assets associated with the generation and transmission of electricity from Barrow. It is noted that specific information about wind farm service vessels (“WFSVs”) is provided in the PEIR including that there were that there were 24 WFSV transits per year between Barrow and Off Skerries through the Morecambe wind farm site and that there were 158 WFSVs transits per year passing “north/south between Liverpool and the offshore windfarms to the north”, “21 of these tracks passed within 1nm of the north-eastern corner of the wind farm site”. Windfarms to the north appear to potentially include Barrow. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed. It is important that any solutions properly take into account existing consent conditions and agreements. We would also appreciate being given the opportunity to Page 3D2804.45 1005730944 1 SM input into and participate in discussions around Navigation risks (including issues of search and rescue lanes and vessel traffic service) and mitigations.</p>	<p>Meetings have been undertaken with existing Irish Sea offshore windfarm developers to discuss the Project. Additionally, Orsted attended the Marine Navigation Engagement Forum (MNEF) and Navigation Risk Assessment (NRA)/ Cumulative Regional NRA hazard workshops.</p> <p>Details of the Project components and estimated vessel movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>
MOR_038_005_020 623	<p>Physical interaction of projects</p> <p>It is very important that Barrow and its associated transmission assets can at all times be accessed to allow for appropriate Operation and Maintenance work and, in due course, upgrading, re-powering and decommissioning activities. It would therefore be useful to understand all of the Morecambe Offshore Wind Project components and routes associated with the proposed works (including proposed transmission works) so that we can establish that access for Barrow, including access for jack-up vessels and anchor splays (etc.), will be maintained and that physical interactions can be avoided, or understood and appropriately mitigated.</p>	<p>The Applicant has engaged with the developers of operational windfarms, including Ørsted, noting the items raised and will maintain engagement moving forward.</p> <p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>
MOR_038_006_020 623	<p>Helicopter activity</p> <p>It is difficult to quantify the level of impact helicopter usage during the construction and operation of the Morecambe Offshore Wind Project. No heliport site(s) or transit route(s) have been identified within the PEIR Documentation. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed.</p>	<p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is anticipated that during the construction and operation and maintenance phases helicopters would route from Blackpool Airport or Liverpool Airport, however this is indicative at this stage and subject to change.</p> <p>A meeting was held between Ørsted and the Applicant on the 25 October 2023 noting that further information would be provided when developed post-consent.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_038_007_020 623	<p>Emergency response</p> <p>We would be happy to discuss with you appropriate communication and collaboration between Barrow, Morecambe Offshore Wind Project, and other nearby offshore wind developments in circumstances where emergency responses are required, for example in the event of accidents or pollution spills.</p>	<p>The Applicant notes your response. An Emergency Response and Cooperation Plan (ERCoP) would be drafted post-consent and lines of communications have been established with the Applicant and existing operational windfarms in the region.</p>
MOR_038_008_020 623	<p>Cumulative and in-combination effects of projects</p> <p>It is important to ensure that all environmental impacts of your project are properly and fully assessed including any potential cumulative or in combination effects with Barrow. As an example, the impact upon Whooper Swan has been the subject of studies in relation to Barrow and these studies have shown Whooper Swan transits through or close to your proposed development. Your Offshore Ornithology chapters has low confidence in the predicted impacts upon Whooper Swan. We would be happy to discuss with you the Whooper Swan studies, and your approach to potential cumulative or in combination effects generally, in order to help ensure a compliant assessment.</p>	<p>Cumulative and in-combination effects are considered and presented in Chapter 11 Marine Mammals (Document Reference 5.1.11), Chapter 14 Shipping and Navigation (Document Reference 5.1.14), Chapter 12 Offshore Ornithology (Document Reference 5.1.12), Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7) and Chapter 9 Benthic Ecology (Document Reference 5.1.9)</p> <p>The Applicant notes your comment on future discussions on the cumulative and in-combination impacts listed.</p>
MOR_039_001_010 623	<p>The Isle of Man Steam Packet response to the subject consultation (Morecambe Offshore Windfarm Generation Assets), we have no object and don't anticipate impact on our long established sea routes of this project when considered in isolation. However when considering this project along with other planned projects i.e. Morgan, Mona & IOM OWF projects along existing OWF projects, we will have serious concerns on Shipping and Navigational Safety issues which indicated in our due to be submitted response for the Morgan Generation assets. On this basis, we once again urge you to consider the accumulative impact created and as expressed on our meetings and demonstrated during the Navigation simulation taken at HR Wallingford.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_040_001_020 623	<p>We are writing to you on behalf of the Chamber of Commerce, a membership based, not-for-profit company. To give some context, Chamber has some 500 member firms, who themselves employ around 20,000 individuals, or almost 50% of the workforce of the Isle of Man (census 43k). We represent every key sector of the Island's economy through our membership, including for the sake of transparency, the Isle of Man Steam Packet who are members. The purpose of this paper is to focus on the economic impact of proposed windfarm developments. We would like to be very clear that Chamber has no objections, indeed no comment, in relation to the policy of windfarm development. Our submission to you is based on the economic impact that will result from the proposed UK offshore windfarm (Morgan & Mona) which will have direct impact on our long-established lifeline sea routes with the UK (Heysham & Liverpool). The location of the planned wind farms will add to journey times and reduce port turnaround times for urgent freight but will more worryingly have a severe effect on the use of adverse weather routes which will lead to more cancellations resulting in direct impact on our Island's vital freight deliveries and visitors. The island is highly reliant on same day fresh foods and imports over 80% of food consumed.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>
MOR_040_002_020 623	<p>You will understand our position in protecting these routes for the IOM and its community who depend on these routes for their daily livelihood needs and travel. We have gathered comments from our Sector Leads in the most effected industries to make it clear the impact the proposed windfarm development will have:</p>	<p>The Applicant notes your response.</p>
MOR_040_003_020 623	<p>██████████ Engineering Director at Strix Ltd and the Sector Lead for our STEM members has given the following statement: 'The Engineering and Manufacturing businesses on the Island are very concerned about any developments that may disrupt the reliability and regularity of the logistics links to the Isle of Man. These links are an essential element of the supply chain in both directions for our businesses, for incoming materials and out flow of products to our</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>customers. In today's economic environment many of our businesses need to operate as lean as possible with regard to holding materials and stocks as well as needing to offer just-in-time delivery performance to our customers. Disruption to the supply chain will very quickly have a detrimental effect on our ability to function which will then directly impact our performance to our customers. Repeated and ongoing customer impact can be very damaging to reputation and future prospects. The last thing we need for business sustainability is to suffer the risk of increased supply chain disruption. Isolated examples of disruption already exist today from natural causes such as storms at sea. When the ferry service is cancelled due to bad weather our materials and products become stalled and priority on the next sailings is given to perishables, food and medical supplies over our supplies. This can quickly escalate to a crisis if sailings do not resume to normal in a reasonable period of time as the backlog will grow.</p>	<p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_040_004_020 623	<p>██████████ Managing Director of Robinsons and Sector Lead for our Local Economy Forum (large locally owned and operated business) has commented: The reliability and cost of the freight service to the Isle of Man is critical to the local retail and hospitality sector, the Group supports projects that deliver economic growth but in this instance would seek detailed reassurances that freight services would not be affected in either its timing's or burdened by extra costs. The Isle of Man retail sector, especially food retailers depend on reliable timed deliveries and any deterioration in the service could damage the prospects for investment in the sector and affect we believe the quality of life on the Isle of Man'.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_040_005_020 623	<p>██████████ CEO of Palace Holdings and Sector Lead for our Visitor Economy Members has provided the following statement: The Isle of Man’s visitor industry is wholly dependent on reliable air and sea routes for its guests to travel to the Island. About 60% percent of our tourists use the sea links serviced by Steam Packet. It is obvious that any disruption or reduction of ferry services will have a material impact on our tourism sector. Even more so now the number of air routes to and from the UK has diminished. A reduced number of visitors to the Isle of Man due to cancelled, delayed or reduced number of sailings will also have a significant effect on our wider local economy. Reduced visitor numbers will lead to reduced spend on island in our retail and hospitality sectors. This will inevitably result in closures in our already fragile retail and hospitality sectors. The Isle of Man’s economy as a whole and our visitor industry in particular can only prosper if it can rely on the existing unobstructed ferry services as the lifeline of our Island nation.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km2 to 87km2 to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company’s (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_040_006_020 623	<p>██████████ Manufacturing Manager for Swagelok Ltd and Sector Lead for our Road, Sea and Air members has provided the following statement: Living on an island means the timely movement of goods and people is paramount to our everyday lives. The Road, sea and air team are very supportive of green energy sources and committed to the regional drive to Net Zero. We are however concerned with the proposed planning location of the offshore windfarms being in the “hub” of our key ferry routes as well as neighboring ferry routes. The alternative routes shall see service performance of Steam Packet drop from 95% to 80% due to an increased impact from adverse weather conditions. This service level has a significant impact on our hauliers being able to provide the levels of service required to support domestic and international businesses. The on-cost of longer routes and more delays shall ultimately be realised by the paying public.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km2 to 87km2 to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company’s (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
<p>MOR_040_007_020 623</p>	<p>The Isle of Man Chamber of Commerce has no objections to any windfarm development obtaining planning approvals - PROVIDED that on its own, or cumulatively our lifeline air and sea routes are unobstructed.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA. Further information on our assessments to aviation and radar is presented in Chapter 16 Civil and Military Aviation and Radar (Document Reference 5.1.16).</p>
<p>MOR_041_001_020 623</p>	<p>I can confirm that Trinity House has the following comments/requests to make at this stage: Any navigable channels or corridors between Morgan, Mona and Morecambe wind farms must comply with MGN654.</p>	

Unique Reference Identifier	Consultation response received	Applicant response
MOR_041_002_020 623	We would welcome your earliest possible consultation regarding proposed turbine layouts, as well as the locations of any other infrastructure, as this matter may well require significant work to reach agreement.	The layout of the windfarm site would be finalised post- consent by the MMO and in consultation with the relevant stakeholders. The Applicant would continue to engage with Trinity House and other appropriate stakeholders to agree the layout prior to construction.
MOR_041_003_020 623	I have attached our most recent standard navigation conditions, which we would expect to be provided for within your DCO/DML. Could you please provide us with the most recent shape files for this project. I hope these comments are helpful and we look forward to working with you throughout this project.	The Applicant provided the most recent shapefile for the Project on the 22 September 2023.
MOR_042_001_020 623	Thank you for the opportunity to respond to the above consultation. The NWIFCA has reviewed the available Documents and has made comments within its remit. The North Western Inshore Fisheries and Conservation Authority is the relevant body for the regulation of inshore sea fisheries within its District and has a range of duties including ensuring the sustainable exploitation of sea fisheries resources and protection of the marine environment from sea fishing activities. NWIFCA makes this response with the best knowledge of Officers. The following constitutes NWIFCA's formal response:	The Applicant notes your response.
MOR_042_002_020 623	1. Fisheries Liaison Officer communication It is vital that a Fisheries Liaison Officer (FLO) establishes and maintains effective communications between the project and fishers at all stages to fully inform fishers of all developments, activities and works associated with this project. Currently it is unclear which fisheries interests in the North West have been contacted in relation to this project and how the project intends to co-operate with fishers as the project continues. Should assistance in identifying relevant fisheries be required, please contact the science team on the contact details above.	The Applicant confirms that a Fishing Liaison Officer is in place who maintains regular communication with the local fishermen's associations. Additionally, communications with the fishing industry are presented in the Outline Fisheries Liaison and Co-existence Plan (Document Reference 6.3), submitted with the DCO application. Face-to-face meetings were held at Annan, Blackpool, Conwy, Kirkcudbright and Whitehaven in September 2023. Regular emails are also issued to a wide network, including Notice to Mariners.
MOR_042_003_020 623	2. Displacement of fishing activity mitigation As mitigation for the reduction in access to, or exclusion from, established fishing grounds and displacement to alternative fishing grounds (particularly for the UK potting fleet), it is noted that a Fisheries Liaison and Coexistence Plan (FLCP) will be created with justifiable disturbance payments. The NWIFCA recognises that this co-ordination is highly important, and the project must ensure continued communication with fishers to ensure appropriate mitigation. If assistance with communicating with industry members or identifying the fishing activity in affected areas is required, please contact the science team on the contact details above.	The Applicant notes your response. The Outline Fisheries Liaison and Co-Existence Plan (Document Reference 6.3) has been submitted with the DCO Application and includes the process for justifiable disturbance payments as within FLOWW guidance.
MOR_042_004_020 623	3. Interaction with commercial shellfisheries Several commercially important shellfish beds (cockle and mussel) are located on the North West coastline in proximity to the proposed transmission cable route. Commercial mussel and cockle beds are located at Lytham and the mouth of the River Ribble, and these are	It is noted that this comment is more applicable to the Morgan and Morecambe Offshore Wind Farms: Transmission Assets and not the Project (Generation Assets). A 'combined' assessment considering both the Project and the Transmission Assets has however been provided within the Cumulative Effects Assessment. This is

Unique Reference Identifier	Consultation response received	Applicant response
	designated shellfish waters. The work has the potential to interfere with these fisheries. We are unable to provide comment at this time as the information relating to precise locations and methodologies of the project is unavailable. Therefore, we ask that we are consulted once the proposal for these works has been developed. NWIFCA hold important information regarding fishing activity in the area which could be of benefit in future impact assessments for the work.	presented in Section 13.7.3.1 of Chapter 13 Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13) so effects to the inshore fishery are considered together.
MOR_042_005_020 623	4. Concerns of commercial fishers There are local fishers with commercial interest in a number of species in the area, specifically Sole, Plaice, Bass and Mullet. This includes an inshore fleet operating from Lytham. These fishers must be contacted and consulted and NWIFCA can assist with this if necessary.	The Applicant confirms that the Fishing Liaison Officer is in contact with Lytham fishers, however the Project effects to the inshore fisheries are largely restricted to effects on targeted species which are assessed in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10).
MOR_042_006_020 623	5. Cumulative impact NWIFCA welcomes the cumulative impact assessment and the continued discussion with developers in the region related to potential mitigation solutions for commercial fisheries. The NWIFCA expects continued communication between the Applicant, NWIFCA, fishers and experts throughout planning, construction, operation and decommissioning of the Project to ensure that any issues arising will be resolved in a timely manner and in a way that is acceptable to all parties. We would like to be consulted on final methodologies to ensure fisheries and fisheries interests are protected.	The Applicant notes your response. The Cumulative Effects Assessment is presented in Section 13.7 of Chapter 13 Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13). Further stakeholder consultation has been undertaken since the publication of the Preliminary Environmental Information Report as outlined in the meetings taken place below. The Outline Fisheries Liaison and Co-Existence Plan (Document Reference 6.3) has been submitted with the DCO application, and includes on ongoing consultation and liaison
MOR_043_001_020 62023	EXECUTIVE SUMMARY 1.1 This Document constitutes Stena Line's response to the Planning Environmental Information Reports ("PEIRs") for the Morecambe Offshore Windfarm Generation Assets (the "Project"). 1.2 Attachments have been added to this submission as supporting annexes and should be considered part of it. 1.3 Stena Line is submitting this response alongside its responses to the PEIRs for the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. Given that the consultations have to a great extent been conducted jointly between the Mona, Morgan and Morecambe projects (collectively, the "Wind Farms") and that Stena Line's main concerns apply equally to all PEIRs, there will be a level of duplication across Stena Line's responses. However, each response is Project specific and highlights Stena Line's concerns regarding the impact on Stena Line's operations arising from that Project. 1.4 Stena Line's main concern throughout the consultation period has been and still is the risks to Navigation safety for its vessels, as well as other vessels operating in the array areas of the Wind Farms. The focus of Stena Line's response has therefore been on the Shipping and Navigation chapters of the PEIRs. Additional comments are made in respect of onshore impact arising from the cumulative effects of the Wind Farms.	The Applicant notes your response. Consultation with ferry route operators, including Stena Line and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2). It is noted that in response to the navigation safety risks identified within the CRNRA (at PEIR stage) that refinements have been made to the Project boundary since PEIR. The Morgan and Mona projects have also made refinements to their respective site boundaries since PEIR. Consideration of the potential cumulative effects with the Morgan and Mona projects and the Morgan and Morecambe Transmission Assets is presented in the CRNRA (Appendix 14.2 (Document Reference 5.2.14.2)) and summarised in Section 14.8 in Chapter 14 Shipping and Navigation. The assessment concludes that with the embedded mitigation measures in place the potential effects on Navigation safety is no more than moderate adverse but ALARP, and therefore not significant in EIA terms.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>1.5 Stena Line reserves the right to submit a further response to the PEIR for Morecambe and Morgan Transmission Assets when this is published.</p>	
<p>MOR_043_002_020 623</p>	<p>1.6 Terms used (a) "COLREGs" means the IMO Collision Regulations as currently in force. (b) "Project Consortia" means collectively the project consortia for the Mona, Morgan and Morecambe Wind Farms, namely EnBW / BP and Cobra / Flotation Energy. (c) "MGN 654" means Marine Guidance Note 654. (d) "Morecambe" or the "Project" means the Morecambe Offshore Windfarm Generation Assets "NRA" means Appendix 14.1 'Navigation Risk Assessment' to the Morecambe PEIR prepared by Cobra / Flotation Energy. (f) "PEIR" means Planning Environmental Information Report and generally refers to the PEIRs submitted by the Project Consortia in respect of the Mona, Morgan and Morecambe Wind Farms. (g) "Wind Farms" means collectively the Mona, Morgan and Morecambe Wind Farms proposed to be constructed in the Irish Sea</p>	<p>The Applicant notes your response. The updated Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) includes a completed MGN 654 checklist.</p>
<p>MOR_043_003_020 623</p>	<p>2. INTRODUCTION 2.1 History of Stena Line Stena Line was founded in Gothenburg, Sweden in 1962. Stena Line is one of the world's largest ferry operators with over 26,000 yearly sailings on routes across Scandinavia and the Baltic, Irish and North Seas.</p>	<p>The Applicant notes your response.</p>
<p>MOR_043_004_020 623</p>	<p>2.2 Core values Stena Line is a family-owned company and its core value is care; care for customers, care for resources and care for each other. Stena Line aims to offer affordable and seamless ferry transportation for all customers and has a commitment to safety, reliability and reducing its environmental footprint. In 2022, over 63 percent of trips ran according to the timetable and Stena Line aims to increase punctuality to a minimum of 67 percent, this will in turn result in lower CO2 emissions as the need to accelerate and use additional fuel to catch up with scheduled arrival times will decrease.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>2.3 Employment</p> <p>Stena Line employs over 5,900 employees from nearly 40 countries, with headquarters located in Gothenburg, Sweden. Stena Line's fleet contains 39 vessels which operate on 18 ferry routes between 10 countries, helping 7 million people reach their destination annually. In 2022 Stena Line had a SEK 17.6 billion annual turnover, which allows Stena Line to invest in more than 300 implemented energy saving projects</p> <p>In the UK, Stena Line's onshore operations employs around 745 people, and a further 1,193 people are employed onboard the vessels that operate on routes around the UK. Stena Line's Liverpool to Belfast and Heysham to Belfast routes are the key routes affected by the proposed Wind Farms and 400 people are employed across these routes. Stena Line's total employees across the Liverpool to Belfast route totals 313. In respect of onshore operations, 90 people are employed by Stena Line at the Birkenhead Port, with a further 72 employed at Belfast Port. In terms of onboard personnel operating the route, 81 people are employed to work onboard the Stena Edda, including 57 international crew assigned to the vessel and 70 people are employed to work onboard the Stena Embla, including 58 international crew. In relation to the Heysham to Belfast route, a further 14 people are employed in onshore operations at Heysham Port. 39 people are employed to work onboard Stena Hibernia and another 39 are employed to work onboard Stena Scotia. Accordingly, Stena Line have a duty to protect the health, safety, welfare and job security of their considerable work force, which they take very seriously.</p>	<p>The Applicant notes your response.</p>
<p>MOR_043_005_020 623</p>	<p>Infrastructure and vessel particulars</p> <p>The routes that Stena Line will address in this PEIR response operate from Liverpool, Heysham and Belfast. The Stena Line Liverpool terminal is located at 12 Quays Terminal in Birkenhead, the Stena Line Heysham terminal is located at the North Quay, Heysham and the Stena Line Belfast terminal is located at Victoria Terminal 2, Belfast. A number of vessels operate the routes between Liverpool and Belfast and Heysham and Belfast. Stena Edda, Stena Embla and Stena Foreteller sail between Liverpool and Belfast and Stena Hibernia and Stena Scotia sail between Heysham and Belfast. The passenger vessels operating between Liverpool and Belfast, Stena Edda and Stena Embla, are part of Stena Line's new E-Flexer class of vessel, which are optimised for efficiency and flexibility and are some of the most advanced and energy efficient vessels in operation. Stena Edda's particulars are: gross tonnage 40,500; year of build 2019. Stena Embla's particulars are: gross tonnage 40,500; year of build 2020. In terms of their capacity, each vessel can carry a maximum of 927 passengers, 120 vehicles and have a freight capacity of 3,100 lane</p>	<p>The Applicant notes your response.</p> <p>Consultation with ferry route operators, including Stena Line and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>The presence of the Project would necessitate a detour for Stena's Liverpool-Belfast East of IoM (East of Calder oil and gas (O&G)) route (in both normal and adverse weather conditions), increasing transit distance by 1.6nm (Table 14.19 in Chapter 14 Shipping and Navigation (Document Reference 5.1.14)) which, on a 114nm passage is not considered likely to significantly adversely impact upon ferry operations. The Applicant has and is continuing to engage with Stena Line on residual operational impacts.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>metres. In terms of fuel consumption and costs, based on the current passage time of 8 hours, distance of the route of 142 nautical miles and fuel prices for March 2023, each trip for Stena Edda and Stena Embla averages over US\$13,000. The Roll On Roll Off (Ro-Ro) Cargo Ship Stena Foreteller services Stena Line's freight operations on the route between Liverpool and Belfast. Stena Foreteller's particulars are: IMO number 9214666; gross tonnage 24688; year of build 2001. The freight capacity of Stena Foreteller is 3000 lane metres. Using the same passage information as above for the Liverpool and Belfast route, the total cost of each trip for Stena Foreteller is estimated to be around US\$10,710. Stena Hibernia and Stena Scotia are the Ro-Ro Cargo Ships transporting freight between Heysham and Belfast. Stena Hibernia's particulars are: IMO number 9121637; gross tonnage 13,017; year of build 1996. Stena Scotia's particulars are: IMO number 9121625; gross tonnage 13,000; year of build 1996. Freight capacity of the Stena Hibernia is 1,710 metres and the Stena Scotia is 1,692 metres. Based on a calculation of the current passage time of 8 hours, distance of 123 nautical miles and fuel prices for March 2023, the total cost per trip for Stena Hibernia and Stena Scotia is averaged at US\$6,555. Fuel is one of the major operating costs for all merchant vessels, and the Stena Line vessels are no exception. This cost item has been brought into sharper focus as fuel prices have rocketed over the past two decades (seeing only brief periods of decline linked to recession) and there has, understandably, been more attention on environmental protection. As elaborated on further below, even the slightest increase to a vessel's regular transit route can exponentially affect this operating expense annually. In Stena Line's case and for the PEIR under consideration, they have a total of 5 vessels potentially impacted. To accurately assess the financial impact to Stena Line, the entire life cycle of the Wind Farms must be considered. It is therefore wholly inappropriate for Flotation Energy to opine that any increase in transit distance is "not likely to adversely impact on ferry operations" (paragraph 193 of the NRA), which in any event conflicts with the rest of the findings of the NRA (as we elaborate on below).</p>	<p>The presence of the Project would not impact the remainder of Stena Lines ferry routes in the area.</p> <p>The Applicant notes your response. The potential for increased fuel consumption associated with increased transit distance is acknowledged in the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) and Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and within our updated assessments.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_006_020 623	<p>2.5 Lifeline service</p> <p>Stena Line is the only ferry operator to operate a direct passenger and RoRo freight route between Liverpool and Belfast. In doing so, Stena Line ensures essential passenger and freight traffic can serve as a link between the respective locations and is able to contribute to the local community and bolster employment in the region. Were Stena Line's operations to be curtailed on this route, there would be no ferry route alternatives, in turn affecting both freight and passenger traffic. This would significantly impact the infrastructure, trading and employment at each location.</p>	<p>Consultation with ferry route operators, including Stena Line and other key stakeholders has been extensive throughout the development of the Project. This includes participation in the Navigation Risk Assessment (NRA) and Cumulative Regional Navigation Risk Assessment (CRNRA) processes, as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the NRA (Document Reference 5.2.14.1), and CRNRA (Document Reference 5.2.14.2).</p> <p>The presence of the Project would necessitate a detour for Stena's Liverpool-Belfast East of IoM (East of Calder oil and gas (O&G)) route (in both normal and adverse weather conditions), increasing transit distance by 1.6nm (Table 14.19 in Chapter 14 Shipping and Navigation) which, on a 114nm passage is not considered likely to significantly adversely impact upon ferry operations. The Applicant has and is continuing to engage with Stena Line on residual operational impacts.</p>
MOR_043_007_020 623	<p>3. ROUTES</p> <p>3.1 Liverpool and Belfast Stena Line operates 38 weekly sailings directly between Liverpool and Belfast on a twenty four hour schedule. The crossing time is approximately 8 hours. The Passenger Ro-Ro's Stena Edda and Stena Embla operate the route along with the Freight Ro-Ro Stena Foreteller. The new E-Flexer class vessels Stena Edda and Stena Embla, which were introduced in 2021, include several emission-reducing technologies such as a streamlined hull, new propellers and two engines instead of four. As well as reducing emissions, the new ferries have also increased passenger and freight capacity on the route by a third. Significant investment in Stena Line's Irish Sea operations reflect Stena Line's commitment to the region - Stena Line has recently signed a new deal with Peel Ports to operate their 12 Quays port and ferry terminal in Birkenhead for another 77 years until 2100. Stena Line has since made further investments to the region with a recent purchase of two sites next to the terminal which will offer additional storage for its freight customers as business is expanded there.</p>	The Applicant notes your response.
MOR_043_008_020 623	<p>3.2 Heysham and Belfast</p> <p>The Stena Hibernia and Stena Scotia perform a dedicated freight service with 22 weekly crossings between Belfast and Heysham, the crossing time is approximately 8 hours. Stena Line recently announced a multi-million pound investment to introduce another two freight ferries to the route in 2025, replacing the older vessels Stena Hibernia and Stena Scotia. The new vessels are set to increase freight capacity on the route by 80%, which will allow Stena Line to keep up with increased customer demand. In line with Stena Line's sustainability targets to reduce its CO2 emissions by 30% by 2030, the NewMax vessels will be</p>	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
	designed to run on methanol and will feature technology to operate on both battery propulsion and shore power where available.	
MOR_043_009_020 623	INITIATIVES Stena Line has been spearheading sustainable practice for many years. In 2015, Stena Line converted the Stena Germanica to run on both diesel and methanol, making it the world's first Roll-on Passenger (RoPax) vessel to do so. Since then, Stena Line has developed the new E-Flexer class vessels and the NewMax vessels. Section 14.96 of Morecambe PEIR Chapter 14 identifies larger new build vessels as being "capable of carrying more cargo" and therefore contributing to an increase in port freight activity. The E-Flexer class and NewMax vessels are a good example of this.	The Applicant notes your response.
MOR_043_010_020 623	<p>GREEN ENERGY</p> <p>Stena Line supports the development of renewable energy in order to phase out reliance on fossil fuels and ensure the UK can align with the emission reduction targets set by the Paris Agreement. Our sister company, Stena Renewable Energy AB is a terrestrial windfarm developer in Sweden with over 201 wind turbines in operation and another 200 under design or construction spread across 14 windfarm sites. Stena very much promotes the generation of green energy and strives to ensure that the sites selected for their development are always carefully assessed for local impact. Stena Line has set a target to reduce CO2 emissions from its vessels by 30% by 2030. At present, 100% renewable electricity is used in Stena Line's shore operation (by purchasing green credits for three of its ports) and about 20% of all Stena Line terminals offer shore power connections to Stena Line vessels. Stena Line is also investing in new green technologies including battery power, quayside powerbanks for charging electric ferries, alternative fuels (including methanol), utilising artificial intelligence in route planning and efficient ship designs. The construction of the Wind Farms poses a concern to Stena Line's sustainability strategy insofar as Stena Line's vessels will be forced to deviate and take longer routes to safely transit around the Wind Farms' footprint. As noted above, this in turn will increase fuel consumption and consequently greenhouse gas emissions. In addition, the impact on Stena Line's route operations may make it more difficult to ensure compliance with international and regional emissions regulations (including the IMO's Energy Efficiency Existing Ship Index and Carbon Intensity Indicator regulations and the EU Emissions Trading System). Accordingly, the Wind Farms' green energy credentials need to be assessed in the round, and according to the impact it will have on Stena Line's, and numerous other stakeholders', own sustainability strategies.</p>	<p>Consultation with ferry route operators, including Stena Line and other key stakeholders has been extensive throughout the development of the Project. This includes participation in the Navigation Risk Assessment (NRA) and Cumulative Regional Navigation Risk Assessment (CRNRA) processes, as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the NRA (Document Reference 5.2.14.1), and CRNRA (Document Reference 5.2.14.2).</p> <p>The presence of the Project would necessitate a detour for Stena's Liverpool-Belfast East of IoM (East of Calder oil and gas (O&G)) route (in both normal and adverse weather conditions), increasing transit distance by 1.6nm (Table 14.19 in Chapter 14 Shipping and Navigation) which, on a 114nm passage is not considered likely to significantly adversely impact upon ferry operations. The Applicant has and is continuing to engage with Stena Line on residual operational impacts.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_011_020 623	<p>HISTORY OF THE PROPOSAL</p> <p>6.1 Stena Line's perspective on history of proposals and involvement to date Stena Line has been partaking as a stakeholder since Q2 of 2021 and have liaised with Nash Maritime who represent the Project Consortia. Stena Line participated in Marine Navigation Engagement Forums (MNEFs) throughout 2022. After requests from Stena Line and other affected ferry operators (namely Isle of Man Steam Packet and Seatruck), Stena Line were also invited to carry out simulation exercises in August 2022. The Marine and Coastguard Agency also attended these simulation exercises. In October 2022, Stena Line attended a two-day HAZID Workshop in Liverpool aimed at assessing various hazards identified in the simulation exercises. In May 2023, further Navigation simulation exercises were carried out with Stena Line to assess the Project Consortia's proposed mitigations to the Navigation safety concerns identified at the previous simulations. These mitigations were in the form of a widening of the channels between the Windfarms and other offshore infrastructure. The joint HAZID Workshops resulting from this are still to take place to quantify their effectiveness. Due to this and the proximity in time between the simulations and the deadline for submitting the PEIR response, Stena Line's observations and comments regarding Navigation Safety are generally limited to the project boundaries as submitted in the PEIRs. Stena Line's Liverpool to Belfast route is significantly affected by the proposed footprint of the Wind Farms. Stena Line has throughout the consultation period highlighted and requested proper assessment of the impacts of the Wind Farms on ferry routes and in particular the need for a cumulative assessment. Stena Line's primary concern is that of safety and how its' affected vessels will be able to navigate the affected areas safely, especially in adverse weather conditions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
<p>MOR_043_012_020 623</p>	<p>CONSULTATION DOCUMENTS 7.1 Stena Line's perspective on the consultation Documents The NRA states that the assessment has been prepared in accordance with MGN 654. MGN 654 requires "stakeholder engagement to ensure that solutions are sought that allow offshore wind farms and navigation uses of the sea to successfully co-exist". On this basis, Stena Line's position is that Navigation risk assessments and consultations should be carried out on the impact of all regularly used routes that traverse the Morecambe Array Areas. Stena Line (and the other affected ferry operators) operate on established routes which must be considered as recognised sea lanes. Stena Line therefore stresses that MGN 654 needs to be considered in full and that all affected commercial routes should form part of the Navigation risk assessments. Stena Line further stresses that the Project Consortia need to continue with the process of risk mitigation in collaboration with all stakeholders as is identified in the forthcoming second round Hazard ID Workshop to ensure that Navigation risks to current operations are reduced to ALARP levels. It should be further stressed that Stena Line will carry the risk once the Wind Farms are constructed and therefore Stena Line reserves the right to determine the level of risk which is acceptable. Stena Line appreciates that Ship Simulation exercises have been carried out but contends that while an exercise can be safely conducted in a simulator on a single transit that the exposure to risk is greatly increased by the frequency at which a vessel transits the area noting that Stena's vessels transited the area 2,997 times in 2019. Over the 35-year life of the Project that is nearly 105,000 transits</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>The Applicant can confirm that the Project NRA includes a completed MGN 654 checklist.</p>
<p>MOR_043_013_020 623</p>	<p>PROPOSAL FOOTPRINT 8.1 Deviation necessary (a) Sections 14.115 and 14.192 of the Morecambe PEIR Chapter 14 assesses the impact of the Morecambe footprint on Stena Line's routes as follows: "One route has been identified as experiencing an increase in transit distance as a result of the Project; the Stena Liverpool to Belfast east of Isle of Man, west of Calder route, which would experience a 1.9nm increase in journey distance... Vessels using this route are primarily northbound existing the Liverpool Bay TSS. Less than one vessel every two days (153 transits per year) were recorded on this route with vessels instead favouring the west of Isle of Man route that passes through the south of the study area (1,422 transits/year (3-4 vessels/day))."</p>	<p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>The Project's updated assessments are presented in Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_014_020 623	(b) Section 330 of the Morecambe NRA (Appendix 14.1) confirms this: "Futurecase passage plans indicate that the Stena Line route between Liverpool / Belfast passing east of Isle of Man is the only route affected adding an additional distance of 1.9nm."	<p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>The Project's updated assessments are presented in Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p>
MOR_043_015_020 623	(c) Considering Table 14.19 of the Morecambe PEIR Chapter 14, it is clear Stena Line's routes are significantly affected by the Morecambe Array Area. Further, the cumulative impact of the footprints of all Wind Farms and the need to deviate has not been properly assessed. The PEIR estimates the deviation to be 1.9nm for the Liverpool-Belfast route passing east of the Isle of Man (See Morecambe PEIR, Chapter 14, Table 14.19 and section 14.192). The deviation is significant for Stena Line's operations which rely on just in time arrival.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>The presence of the Project would necessitate a detour for Stena's Liverpool-Belfast East of IoM (East of Calder oil and gas (O&G)) route (in both normal and adverse weather conditions), increasing transit distance by 1.6nm (Table 14.19 in Chapter 14 Shipping and Navigation) which, on a 114nm passage is not considered likely to significantly adversely impact upon ferry operations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_016_020 623	<p>The PEIR claims that the additional transit distance "is not likely to adversely impact upon ferry operations" (see Morecambe PEIR, Appendix 14.1, section 8.2.3.193). Stena Line disagrees as the nature of ferry routeing and in particular passenger ferry routeing is that any increase in transit distance adversely impacts Stena Line's operations and will have a knock on effect on costs, customer satisfaction, crew operations and the environment. By way of example, section 14.120 of the Morecambe PEIR Chapter 14 acknowledges an increased transit distance of 1.9 nautical miles. When this is compared to the 141 nautical mile passage (as the PEIR does), it may appear inconsequential. However, two transits on average a day equates to 1,387 per annum or 195t of bunker fuel which, on current prices, is in the region of USD\$ 120,000 increased operating costs per annum, which is significant. When considered for the anticipated 35-year life cycle of the Wind Farms, this additional cost increases exponentially. Accordingly, the conclusion at section 14.200 of the Morecambe PEIR Chapter 14 that the significance of such rerouteing could be minor – moderate adverse is rejected.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>The presence of the Project would necessitate a detour for Stena's Liverpool-Belfast East of IoM (East of Calder oil and gas (O&G)) route (in both normal and adverse weather conditions), increasing transit distance by 1.6nm (Table 14.19 in Chapter 14 Shipping and Navigation (Document Reference 5.1.14)) which, on a 114nm passage is not considered likely to significantly adversely impact upon ferry operations.</p>
MOR_043_017_020 623	<p>The Morecambe NRA acknowledges Stena Lines' concerns at section 182, which should be deemed as repeated herein.</p>	<p>The Applicant notes your response.</p>
MOR_043_018_020 623	<p>(f) Stena Line must consider the impact of the Wind Farms' footprint on its operations during the construction phase, the years of operation and during decommissioning. Stena Line expects the construction phase to be particularly disruptive to its voyages and the need to deviate will lead to delays. The Project Consortia have estimated construction time to be 4 years for Mona, 2.5 years for Morecambe and 4 years for Morgan. Should the construction phase take longer than estimated, Stena Line needs to factor this into its planned operations. Further, it is not clear to Stena Line what the Marine Operating Guidelines will include in relation to risks and necessary deviation during construction of the Wind Farms. The adverse impacts on ferry routeing during the construction phase are highlighted in the Morecambe PEIR, Chapter 14, section 14.112-113:</p> <p>"Existing ferry traffic could be displaced during construction due to the presence of buoyed construction areas, active safety zones, construction vessels and partially completed or pre-commissioned structures....</p> <p>For regular runners such as ferries, the obstruction and subsequent re-routing presented by windfarm construction activities has the potential to result in increased costs or to make schedules unviable. Impacts on routeing may in turn lead to increased collision or contact risks... Increased fuel burn increasing environmental implications may also result."</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>Consideration of impacts to ferry routeing during the construction phase is presented in Chapter 14 Shipping and Navigation of the Environmental Statement.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_019_020 623	(g) Such comments are significant for Stena Line. Construction of the Wind Farms essentially changes what would normally be considered open sea to restricted (and in some parts, severely restricted) areas of navigation. The corresponding impact on the bridge composition requirements need to be considered but more fundamentally, Stena Line are concerned with preserving safety of navigation for the protection of life and preservation of the environment. The comments made at section 14.116 of the Morecambe PEIR, Chapter 14, are redundant as unlike the Wind Farms, the previous offshore windfarm projects highlighted did not materially impact any existing ferry routes.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>Consideration of impacts to ferry routeing, including the data sets used in our assessments, are updated and presented in Chapter 14 Shipping and Navigation of the Environmental Statement.</p>
MOR_043_020_020 623	(h) Finally, Stena Line notes with concern that no decisions have been made as to the final decommissioning strategy. The PEIR simply assumes the impacts will be "no greater" than during the construction phase (see Table 14.2 of Morecambe PEIR, Chapter 14). Stena Line queries how such an assumption can be made and how the Navigation risk assessments can be adequate if decommissioning has not been addressed.	The Decommissioning Programme for the Project would be submitted to the Secretary of State for approval closer to the time and will take account of relevant circumstances and potential mitigation measures towards the end of the lifetime of the Project. Further and updated discussion on the decommissioning phase assessment can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_021_020 623	<p>Navigation safety Overview</p> <p>(a) At the outset, Stena Line underlines and emphasises that the NRA published in the Morecambe PEIR (see the NRA, section 10.2.3(319)) concludes that the cumulative effect of the Wind Farms create hazards with unacceptable risks to Navigation safety and fail requirements in both NPS EN-3 2.6.165 and MGN 654 Annex 1.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_022_020 623	<p>(b) Stena Line notes that the top five hazards in the Cumulative Navigation Risk Assessment for the Wind Farms are all High Risk – Unacceptable, all of which include possible collision scenarios involving ferries in various locations (see Table 14.26 of the Morecambe PEIR, Chapter 14). According to section 14.49 of Morecambe PEIR, Chapter 14 the frequency of occurrence is "reasonably probable". On any view, Stena Line cannot be expected to accept this level of risk.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_023_020623	<p>(c) While risk control options are discussed, the PEIR acknowledges that these are conceptual at this stage and have not been implemented. In any event, Stena Line does not agree that the conceptual risk controls are appropriate or likely to be effective. Notably, a number of the risk controls proposed would only mitigate the effects of an incident, rather than preventing it occurring in the first place. As such, they cannot properly be categorised as risk controls.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_024_020 623	(d) Fundamentally, Stena Line, as a ferry operator in the region are responsible for the safety of their crew and passengers, owe a duty of care to others and are responsible for stewardship of the environment. As such, Stena Line cannot accept the risks and failures to Navigation safety set out in the NRA and is concerned that the proposed mitigation and risk control options will not be sufficient.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_025_020 623	<p>Data sets used and methodology</p> <p>(e) Stena Line acknowledges the Navigation risk assessments that have already been conducted, including the Cumulative Regional Navigation Risk Assessment (CRNRA) undertaken collaboratively for the Wind Farms.</p>	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_026_020 623	(f) Stena Line's major concern throughout the consultation process has been that of Navigation safety. As noted above, Stena Line's primary obligation is to ensure the safety of their employees, crew and passengers which may number up to 1000 persons on summer sailings along with the protection of the environment, which is the motivation for this concern.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_027_020 623	<p>(g) While Stena Line recognises the impact the COVID-19 pandemic may have had on recreational and commercial vessel movements, the omission of data sets from 2020-2022 means the PEIR relies on outdated information and importantly does not reflect the surge in ferry traffic post-pandemic. Whilst the PEIR acknowledges that Stena Line has recently replaced several of their ferries with the new E-flexer class and that the Liverpool/Belfast route has seen an increase in passenger numbers, it asserts that "predicting how these trends may influence vessel schedules and routes is full of uncertainty." Stena Line queries the assumption made that "vessel routes and schedules will be similar in 2035 as to the existing base case" as traffic may well have increased beyond pre-pandemic levels in future (Morecambe PEIR Chapter 14, section 14.100). In fact, Stena Line has obtained data contesting such findings, including port call figures for cruise ships that show an increase of calls to the Ports of Liverpool and Belfast in 2022 and projected for 2023. Accordingly, the estimate of approximately 25 cruise ships per year passing to the south of the proposed Morecambe location as stated in section 113 of the NRA is likely insufficient.</p>	<p>The Navigation Risk Assessment (NRA (Document Reference 5.2.14.1)) and Cumulative Regional Navigation Risk Assessment (CRNRA (Document Reference 5.2.14.2)) and Chapter 14 Shipping and Navigation (Document Reference 5.1.14) has been updated to take account of data from 2022 from a variety of data sources, including 2022 Automatic Identification System (AIS) Marine Traffic Data as presented in Table 14.7 in Chapter 14 Shipping and Navigation.</p> <p>Assumptions in relation to future case ferry trends are set out in Section 14.6.2 in Chapter 14 Shipping and Navigation.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_028_020 623	(h) In addition, Stena Line has increased the number of vessels operating on its Belfast Liverpool route since 2019. There are now two passenger Ro-Ro vessels plus a freight vessel. Relying on old data therefore distorts and misrepresents the current and future scenarios for Stena Line's operations and routes.	The Navigation Risk Assessment (NRA (Document Reference 5.2.14.1)) and Cumulative Regional Navigation Risk Assessment (CRNRA (Document Reference 5.2.14.2)) and Chapter 14 Shipping and Navigation (Document Reference 5.1.14) has been updated to take account of data from 2022 from a variety of data sources, including 2022 Automatic Identification System (AIS) Marine Traffic Data as presented in Table 14.7 in Chapter 14 Shipping and Navigation.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_029_020 623	(i) More generally, Stena Line are concerned that the Wind Farms have confined their analysis of historical data to the UK region. Given the global development of offshore wind farms, much of which pre-dates developments in and around the UK (particularly in the rest of Europe), Stena Line considers it would have been more appropriate to consider global (or, at least European) statistics.	<p>Appropriate historical data has been considered and presented within the Navigation Risk Assessment (NRA (Document Reference 5.2.14.1)) and Cumulative Regional Navigation Risk Assessment (CRNRA (Document Reference 5.2.14.2)) and Chapter 14 Shipping and Navigation (Document Reference 5.1.14).</p> <p>Each offshore wind farm project needs to be treated on a case-by-case basis, taking into account the traffic profile and geography of the study area and therefore incident analysis is only used for indication of the types of hazards which could occur. The UK, until recently, has been the world leader in offshore wind and therefore has the most operational experience than other countries. Moreover, other geographies have different risk management approaches to offshore wind and therefore cannot be directly comparable to the UK approach. Section 5.3.4 of the Cumulative CRNRA draws in relevant historical incidents involving offshore windfarms outside of the UK for these purposes.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_030_020 623	<p>Assessment of incident risks</p> <p>(j) Crucially, the NRA (see Morecambe PEIR, NRA, section 10.2.2.313-314 and page 167), concludes that the possibility of a collision between ferry/passenger vessels and another such vessel or a cargo/tanker vessel is a high risk and unacceptable hazard. Such risks directly impact Stena Line as a passenger ferry operator carrying thousands of passengers and cannot be accepted.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_031_020 623	<p>(k) The severity of consequence of an allision between a vessel and a wind turbine is concluded to be moderate (see section 14.228 of Morecambe PEIR, Chapter 14). This is a significant risk to Stena Line that has vessels traversing the areas in and around the proposed Wind Farms on a daily basis. The PEIR observes in respect of the allision risk at section 14.147 of the Morecambe PEIR Chapter 14:</p> <p>"... The most likely outcome is, therefore, minor damage and/or minor injuries. However, it is feasible that a worst-case allision might result in turbine collapse, holing, flooring and potential loss of life, though this is considered unlikely."</p>	<p>The Applicant notes your response.</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>Updated assessments are presented in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p>
MOR_043_032_020 623	<p>(l) The PEIR's impact assessment methodology and the matrix used for the assessment of the significance of the effect offers a generous risk tolerance compared to maritime industry standards and Stena Line therefore queries its appropriateness and whether it has been properly stress-tested.</p>	<p>The PEIR's assessment matrix was aligned with the matrix used within the Navigation Risk Assessment. Further information is presented in Chapter 14 Shipping and Navigation (Document Reference 5.1.14).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_033_020 623	<p>m) Regarding the review of historical incidents within the shipping and navigation study areas, Stena Line queries the relevance of analysing historical incidents in an area that will be subject to a significant and unprecedented construction project. Whilst Stena Line acknowledges that the review of MAIB and RNLI databases appears thorough, the future risks of condensing vessel traffic to narrower navigation corridors will be a wholly separate consideration compared to any historical data obtained of previous incidents in an area with significantly less Navigation constraints or concentrated traffic density. Similarly, the EMSA analysis included at section 14.167 of the Morecambe PEIR, Chapter 14 regarding the consequences of a collision are of little comfort to Stena Line and Stena Line queries the basis for the modelling at Table 14.21 for the likelihood of allision ents. More generally, the IWRAP allision results identified in the NRA (Table 28) indicate a roughly three-fold increase in allision occurrences based on future traffic projections, which is significant.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Analysis of incident data is suggested in MGN 654 and stakeholders have been consulted on the use, sources and extent of incident data within this assessment. The Maritime Coastguard Agency (MCA) has been fully briefed on the NRA approach and have indicated their approval with this approach.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_034_020 623	<p>(n) Further, Stena Line highlights that two recent allisions have not been considered in the PEIR, namely the "ROCK PIPER" (September 2022 allision between vessel and gravity foundation of future wind farm Fécamp) and "PETRA L" (April 2023 deviation of vessel into wind farm array area). Further, the PEIRs have not listed and seemingly not assessed reported 'near miss' incidents. In Stena Line's own research, at least 10 'near miss' incidents were identified involving vessels in or near wind farms. While the investigation of 'near miss' incidents may not be as detailed, they are imperative for assessing the risk profile of the Wind Farms in terms of navigation safety.</p>	<p>Section 6.5.1 of the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) considers historical accidents associated with UK operational OWFs which includes Reference to 13 near miss incidents. These incidents have been used to inform the Project's risk assessment process.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_035_020 623	<p>(o) Overall, the conclusions of the PEIR on review of the historical incidents of vessels involving UK operational offshore wind farms is simplistic. Paragraph 14.165 of Chapter 14 of the Morecambe PEIR asserts:</p> <p>"Analysis of historic incidents within the study area identified 69 incidents between 2010 and 2019. This includes six collisions, 29 allisions, 21 groundings and 13 near misses. Eighty-two percent of incidents involved project craft (such as CTVs or construction vessels). Therefore, over a typical 25 to 35 year operational duration, the incident rate is expected to be low, with a typical project anticipated to experience three allisions, two groundings and one collision or near miss. There are currently no recorded accidents involving large commercial shipping and offshore windfarms in the UK, during construction."</p>	<p>Section 6.5.1 of the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) considers historical accidents associated with UK operational OWFs which includes Reference to 13 near miss incidents. These incidents have been used to inform the Project's risk assessment process.</p>
MOR_043_036_020 623	<p>p) Whilst Stena Line understands that review of historical incident data may be informative to a certain extent, it must be stressed that each Project and the associated risks will be particular and unique. Further, even one allision or collision in the navigation channels would seriously impact navigation of commercial vessels and ferry traffic, and in turn affect Stena Line's operations. Further, the PEIR does not properly assess these risks, instead making statements such as:</p> <p>"The east Irish Sea however already has various offshore infrastructure present, including offshore windfarms... and as such vessels navigating this area are familiar navigating around and between various types of infrastructure" (see Morecambe PEIR, Appendix 14.1, section 8.4.7.216).</p> <p>and (in relation to collision risk for Project related vessels):</p> <p>"any increase in risk could be mitigated by careful passage planning and communication with other vessels" (see NRA section 235).</p>	<p>The Applicant notes your response. The Project assessments have been conducted in line with industry guidance and best practice and are presented in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) of the Environmental Statement and Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p>
MOR_043_037_020 623	<p>(q) Statements like these are unhelpful and unwelcome and do not recognise the complexity of routeing, passage planning and operating a vessel, especially in dense traffic caused by offshore obstructions.</p>	<p>The Applicant notes your response. The Project assessments have been conducted in line with industry guidance and best practice and are presented in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) of the Environmental Statement and Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p>
MOR_043_038_020 623	<p>(r) In addition, the PEIR has assumed that the future case scenario for ferry and passenger vessels traffic will remain unchanged (see Morecambe PEIR, Appendix 14.1, section 8.5.2(223)). As discussed above, Stena Line queries the basis for this conclusion and is concerned that assumptions such as this mean the collision risk has not been properly assessed.</p>	<p>Assumptions in relation to future case ferry trends are set out in Section 14.6.2 in Chapter 14 Shipping and Navigation (Document Reference 5.1.14).</p>
MOR_043_039_020 623	<p>(s) Further, Stena Line notes that nearly all of the impacts on routeing and associated Navigation concerns (save for snagging) are deemed to have potential for cumulative effect (see Table 14.24 of the Morecambe PEIR, Chapter 14).</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_040_020 623	(t) Stena Line's concern with the above conclusion is that certain incidents and/or Navigation risks are accepted as inevitable and not properly analysed or mitigated for. While absolute certainty and safety are of course difficult, if not impossible, to achieve, it appears simplistic to accept and rely on historical incident data to the extent done by the Project Consortia. Stena Line encourages further Navigation risk assessments and stakeholder engagement to ensure navigating in the vicinity of the Wind Farms is as safe as possible.	<p>The Applicant notes your response. Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_041_020 623	<p>Adverse weather routeing</p> <p>(u) The nature of Stena Line's operations and the design of their vessels make it more susceptible to disruption due to adverse weather. Stena Line's operations rely on both freight and passenger traffic, where safety (primarily) and comfort and enjoyment (secondarily) play an important role in the customer experience. It should be noted that the two EFlexer Class vessels are certified to carry up to 1,000 persons on board. It is therefore vital to the continued operation of Stena Line's routes that appropriate weather routeing is available that minimally impacts passenger experience and sailing time.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_042_020 623	<p>(v) The Project's footprint and the cumulative impact of the presence of such a volume of offshore windfarms effectively reduces the options available to our vessels' Masters to alter course to alleviate vessel motion. The consequence of our Masters no longer having a full range of routing and alteration options, may at the very least result in cancelled sailings. At worst, Masters may find themselves whilst on passage in a situation where excessive vessel motion cannot be mitigated by altering course and this in turn may potentially result in cargo shift or injuries to passengers and/or crew on board. It should be highlighted that the RoRo MV Riverdance suffered such a fate in January 2008 where her cargo shifted in adverse weather and the vessel grounded near Blackpool and was a declared a constructive total loss.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_043_020 623	<p>(w) Sections 6.4.14(142) and 8.2.2(190) of the Morecambe PEIR (Appendix 14.1, Navigation Risk Assessment) acknowledges the impact the Morecambe Array Area would have on ferry traffic and on Stena Line's routes in particular:</p> <p>"Prevailing south westerly adverse weather typically results in ferries taking a more south-westerly transit in order to both control the course relative to the conditions and take advantage of the lee from the shore. This minimises dangerous motions aboard the vessel and improves passenger comfort"</p> <p>...</p> <p>"Stena Liverpool to Belfast routes in adverse weather tend to transit to the southwest on the study area, towards the prevailing conditions and are therefore unaffected by the project."</p>	The Applicant notes your response.
MOR_043_044_020 623	<p>(x) Whilst the impact on adverse weather routing of Morecambe in isolation may be small, Stena Line notes that the cumulative effect of the Wind Farms on its routing and operations will be further affected in adverse weather. This is acknowledged in section 10.2(301) of Morecambe PEIR Appendix 14.1:</p> <p>"... The passage to the east of the Isle of Man would, however, necessitate ferries route around both the Morecambe Project and Morgan Project resulting in an increase of ten minutes. During adverse weather, this could necessitate an additional 46 minutes of transit between the three Projects, likely making the east route less favourable."</p>	The Applicant notes your response.
MOR_043_045_020 623	<p>(y) Considering Stena Line's current operations, a delay of this nature risks significantly impacting customer satisfaction. Stena Line as a ferry operator is also more susceptible to these types of disruptions.</p>	<p>The Applicant notes your response.</p> <p>Our latest assessments considering the boundary change are presented in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) of the Environmental Statement and Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p>
MOR_043_046_020 623	<p>Mitigation measures</p> <p>(z) Table 14.3 of the Morecambe PEIR Chapter 14 sets out a number of measures adopted that form part of the Project design. However, it is not clear to Stena Line exactly how many of these measures will be adopted or enforced, beyond a commitment by the Project Consortia to implement them. Further, Stena Line requests further explanations on what mitigation or contingency plans are in place in the event some measures are not adopted or properly enforced during the Project lifetime.</p>	<p>Mitigation measures are set out within Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and NRA (Document Reference 5.2.14.1) and within the Schedule of Mitigation (Document Reference 5.5).</p> <p>A draft Deemed Marine Licence (DML) (schedule 6 within the Draft DCO (Document Reference 3.1)) is submitted as part of the Application. These measures would be secured through the draft DCO. Enforcement on these measures would fall to the relevant authority, such as the MMO. The MMO, in consultation with relevant stakeholders, would discharge the conditions and subsequent inspections of enforcement of conditions under the Deemed Marine Licence.</p>
MOR_043_047_020 623	<p>(aa) Several proposed measures lack necessary detail. By way of example, it is unclear what "poor conditions" for use of fog horns entail and how this requirement will be operated in practice. Similarly, the use</p>	<p>Mitigation measures are set out within Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and NRA (Document Reference 5.2.14.1) and within the Schedule of Mitigation (Document Reference 5.5).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	of guard vessels "as necessary" does not make clear when or how such a measure will be taken.	
MOR_043_048_020 623	(bb) Other proposed measures are unrealistic and, if adopted, risk falling foul of international regulations. Section 14.236 of the Morecambe PEIR Chapter 14 discusses how the geometries of offshore wind farms could reduce the visible appreciation of other vessels and claims "however, larger vessels would be identifiable from AIS and therefore passing arrangements could be agreed." The suggestion that AIS should be relied on for collision avoidance is deeply concerning. Marine Guidance Note 324 stresses that AIS information should be "treated with extreme caution and only used for enhancing situation awareness and not for collision avoidance decision making." (See MGN 324, section 4.10) Stena Line submits that such proposed reliance on AIS as a collision avoidance tool is contrary to Industry guidelines and could be in breach of COLREG 7(c).	Mitigation measures are set out within Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and NRA (Document Reference 5.2.14.1) and within the Schedule of Mitigation (Document Reference 5.5). As noted in the NRA, (Paragraph 8.7.1.1.3 states) "However, larger vessels would be identifiable from AIS (and tracked by radar/visual means) and, therefore, passing arrangements should be planned in accordance with COLREGs."
MOR_043_049_020 623	(cc) There is also a lack of detail on how measures will be enforced, for example in relation to Marine Operating Guidelines, the Vessel Traffic Management Plan, vessel standards, PPE, training and vessel monitoring. Further, a statement that vessels should comply with international, UK and Flag State regulations cannot be classified as a mitigation measure but is rather the minimum standard expected for seagoing vessels. Overall, the proposed mitigation measures must be backed up by tangible and effective methods of implementation and enforcement.	Mitigation measures are set out within Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and NRA (Document Reference 5.2.14.1), Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2) and within the Schedule of Mitigation (Document Reference 5.5) A draft Deemed Marine Licence (DML) (schedule 6 within the Draft DCO (Document Reference 3.1)) is submitted as part of the Application. These measures would be secured through the draft DCO. Enforcement on these measures would fall to the relevant authority, such as the MMO. The MMO, in consultation with relevant stakeholders, would discharge the conditions and subsequent inspections of enforcement of conditions under the Deemed Marine Licence.
MOR_043_050_020 623	(dd) The statement at section 14.43 of the Morecambe PEIR, Chapter 14 that "it is assumed that, if implemented, those hazards that are unacceptable will be adequate to reduce hazards ALARP and would not, there, be significant in EIA terms" is very concerning. Assumptions such as this are not appropriate in matters of safety	Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2). Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km ² to 87km ² . The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation. A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects.

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_051_020 623	(ee) Overall, while Stena Line recognises and supports the measures listed, its concern is how the measures will be achieved and regulated in practice so as to have any effect beyond being a statement of intent.	<p>Mitigation measures are set out within the respective chapters of the Environmental Statement and within the Schedule of Mitigation (Document Reference 5.5) and would be secured in the draft DCO and Deemed Marine Licence.</p> <p>A draft Deemed Marine Licence (DML) (schedule 6 within the Draft DCO (Document Reference 3.1)) is submitted as part of the Application. These measures would be secured through the draft DCO. Enforcement on these measures would fall to the relevant authority, such as the MMO. The MMO, in consultation with relevant stakeholders, would discharge the conditions and subsequent inspections of enforcement of conditions under the Deemed Marine Licence.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_052_020 623	<p>Cumulative effects</p> <p>(ff) Generally, Stena Line is concerned with the PEIR's lack of consideration for how cumulative effects of several factors have not been considered when assessing Navigation safety. Table 20 of Morecambe PEIR Appendix 14.2 (CRNRA) claims to show 'realistic traffic scenarios' in different areas with various vessels. Crucially however, the PEIR has not assessed the interactions between the different types of vessels (ferries, commercial, tug, fishing and recreational). Instead, they are assessed individually as to how each type may converge with vessels of the same type rather than how vessels of different types may converge. This therefore appears to present a highly theoretical scenario and the cumulative effects of different vessel types interacting has not been fully assessed. The PEIR's CRNRA confirms this by acknowledging that neither fishing and recreational vessels nor non-direct transits such as loitering or pilot boarding have not been included in the analysis of concurrent frequency of two vessels meeting in the relevant areas (see Morecambe PEIR, Appendix 14.2, section 8.7.2). This clearly shows that cumulative effects of different vessels have not been properly analysed.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_053_020 623	<p>(gg) Another concern is how the combined footprint of the Wind Farms will make traversing the corridors between them more difficult for Stena Line and other vessel operators. The Morecambe PEIR recognises that "two vessels proceeding north to the west and east of Mona Array Area to pass between Mona and Morgan Array Areas would not have visual sight of one another until potentially within the constrained corridor" (see Morecambe PEIR, Appendix 14.2, section 8.7.4). This is a very real issue for any vessels transiting the area as there is a danger that vessels interpret the COLREGs differently based on their own visual sightings. Whilst the PEIR Reference the COLREGs, it is not acknowledged that COLREGs section II (Rules 11 to 18) only apply to vessels that are in sight of one another. The need for proper mitigation measures is therefore crucial to avoid collision risk.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_054_020 623	(hh) The cumulative effects of the Wind Farms would also exacerbate the impact of adverse weather routeing as vessels transit the designated corridors. The Navigation Simulation exercises revealed that adverse weather conditions would be uncomfortable and hazardous to passengers, likely leading ferries to take a more circuitous route around the Wind Farms rather than through the corridors. The PEIR notes however that if weather conditions would worsen while a vessel was in the corridor, "there is little opportunity for the master to mitigate those conditions. Therefore, as excessive roll starts to be experienced, the master may for instance turn into wind, but in doing so will increase the risk of allision with the offshore wind farm." Such risks are highly concerning and not acceptable to Stena Line.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_055_020 623	<p>Impact on the environment</p> <p>(a) Stena Line's vessels will be required to deviate around the Wind Farms, which will increase the transit distance (as discussed above) and in turn will increase fuel consumption.</p>	<p>Consultation with ferry route operators, including Stena Line and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>The presence of the Project would necessitate a detour for Stena's Liverpool-Belfast East of IoM (East of Calder oil and gas (O&G)) route (in both normal and adverse weather conditions), increasing transit distance by 1.6nm (Table 14.19 in Chapter 14 Shipping and Navigation (Document Reference 5.1.14)) which, on a 114nm passage is not considered likely to significantly adversely impact upon ferry operations.</p> <p>The presence of the Project would not impact the remainder of Stena Lines ferry routes in the area.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_056_020 623	(b) Increased fuel consumption increases the vessels' greenhouse gas emissions and as such will have a detrimental environmental impact. Further, this may impact Stena Line's ability to comply with international and regional environmental emissions regulations as well as its ability to achieve Stena Lines's own climate goals. The environmental impact for ferry operators is recognised in the PEIR (see NRA, section 8.2.182).	The Applicant notes your response. The potential for increased fuel consumption associated with increased transit distance is acknowledged in the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) and Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and within our updated assessments.
MOR_043_057_020 623	(c) The IMO's Carbon Intensity Indicator (CII) regulation, which came into force in January 2023, are a set of mandatory measures implemented by the International Maritime Organization (IMO) to reduce greenhouse gas emissions from commercial ships as part of efforts to combat pollution and climate change. The CII Index of a vessel is used to determine how efficiently ships operate. Every vessel is required to have its CII rating calculated and independently verified. Vessels are given a CII rating of A, B, C, D, or E, with A being the best possible rating. A ship that is rated D for three consecutive years, or E in one year (e.g. those with the highest carbon intensity) will be required to submit a "corrective action plan" that outlines how the vessel will be brought to a minimum C rating. The most effective mitigations to improve the CII rating of a vessel is to reduce its speed on passage and improve its voyage planning. Clearly large new obstructions on passage such as windfarms will adversely affect a scheduled service where increased speed will be required to ensure timetabled services are met. If a ship or ship owner is noncompliant with the CII regulation, they may face financial penalties and increased costs for refinancing non-compliant ships, as well as a poor CII rating which could affect their business in the long term.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_058_020 623	(d) In line with the regulations, Stena Line have calculated the operational CII for all its vessels that fall within the scope of the regulation. Based on data and calculations available at the time of this response, both Stena Edda and Stena Embla are estimated to fall into CII Band B. Stena Foreteller meanwhile is estimated to fall within Band E. Based on data and calculations available at the time of this response the Stena Hibernia is estimated to fall within CII Band B and Stena Scotia in Band D. Any increase in speed and/or fuel consumption required to navigate around the Windfarms is therefore a risk to Stena Line's vessels' ability to comply with the regulation.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_059_020 623	<p>Stena Line's ability to continue operating its routes</p> <p>(a) It is clear from the above analysis that a combination of factors, including (1) the deviation required by Stena Line's vessels during construction and operation of the Wind Farms, (2) adverse weather routeing, and (3) Navigation risks will have a financial and operational impact on Stena Line. The consequences will include delays to voyages due to the longer routes required and increased fuel consumption. This is likely to have a knock-on effect on customer satisfaction and may ultimately make continued operation of Stena Line's routes unviable.</p>	<p>Consideration of impacts to ferry routeing during the construction phase is presented in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) of the Environmental Statement.</p> <p>Consultation with ferry route operators, including Stena Line and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement, the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>It is noted that in response to the navigation safety risks identified within the CRNRA (at PEIR stage) that refinements have been made to the Project boundary since PEIR. The Morgan and Mona projects have also made refinements to their respective site boundaries since PEIR.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p>
MOR_043_060_020 623	<p>(b) Separately, the construction and footprint of the Wind Farms may potentially restrict or reduce the opportunities for Stena Line to develop new routes in the future where the Wind Farms increase travel distance and risk making any proposed routes less competitive to other methods of transport.</p>	<p>The Applicant notes your response.</p>
MOR_043_061_020 623	<p>ONSHORE IMPACT</p> <p>9.1 General</p> <p>(a) Stena Line has evaluated the cumulative onshore impact of the Wind Farms in relation to its operations.</p>	<p>The Applicant notes your response.</p>
MOR_043_062_020 623	<p>(b) The onshore impact of the Morecambe and Morgan Wind Farms cannot be fully evaluated at this time as insufficient materials are available. It is understood that this is likely to be a result of the statutory consultations for the Morecambe and Morgan Transmission Assets being dealt with separately, at the end of 2023.</p>	<p>Statutory consultation for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets took place from 12 October to 23 November 2023. The Applicant has no further comment.</p> <p>Potential cumulative effects between the Project and the Transmission Assets Project are presented in Chapter 23 Summary: Generation and Transmission Assets Assessment (Document Reference 5.1.23).</p>
MOR_043_063_020 623	<p>(c) It is acknowledged that the approach taken by the Morecambe and Morgan Wind Farms to distinguish between Generation and Transmission Assets is pragmatic and efficient; given that the Morecambe and Morgan Wind Farms are sharing the same</p>	<p>Whilst the statutory consultation for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets did not take place alongside of the other Round 4 Offshore Windfarm Projects, a non-statutory consultation was undertaken at the same time as the statutory consultation for the Project and the other Round 4 projects,</p>

Unique Reference Identifier	Consultation response received	Applicant response
	Transmission Assets (i.e., the same landfall area, onshore export cable corridor, etc.). However, it is unclear why the statutory consultation for the Morecambe and Morgan Wind Farms' Transmission Assets was not held concurrently with the statutory consultation of (i) the Mona Wind Farm; and (ii) the Morecambe Generation Assets; and (iii) Morgan Generation Assets.	where stakeholders had opportunity to provide their feedback on the proposals presented.
MOR_043_064_020 23	(d) It is not possible to fully input, evaluate and assess the (i) impact of the Morgan Wind Farm; (ii) impact of the Morecambe Wind Farm; and (iii) cumulative impact of the Mona, Morecambe and Morgan Wind Farms, where detailed submissions are missing in respect of the onshore impact of the Morgan and Morecambe Wind Farms. As a result, Stena Line (and other stakeholders) are unable to form reasoned opinions and views on the onshore impact of the Wind Farms. It cannot be said that Stena Line or other stakeholders have been properly consulted on the onshore aspects when the information has not been made available to them.	Statutory consultation for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets took place from 12 October to 23 November 2023. The Applicant has no further comment. Potential cumulative effects between the Project and the Transmission Assets Project are presented in Chapter 23 Summary: Generation and Transmission Assets Assessment (Document Reference 5.1.23).
MOR_043_065_020 623	Seascape, Landscape and Visual Resources (a) Chapter 26 of the Mona PEIR (paragraph 26.13.5.13) acknowledges that there is "a sense of 'filling' of the area between the North Wales and Northwest England clusters" and that, throughout the operations and maintenance phase of the Mona Wind Farm will be of moderate or major adverse significance on the aesthetic and overall character of the landscape and seascape on the Mona Array Area (and adjacent areas) (paragraphs 26.13.5.15 and 26.13.6.15). Figure 15.21 of the Morgan PEIR Chapter 15 also highlights the volume of wind farms (beyond Mona, Morecambe and Morgan).	The Applicant has no further comment as feedback refers to the Mona Offshore Wind Project and the Morgan Offshore Wind Project Generation Assets.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_066_020 623	(b) Stena Line's view is that these comments extend beyond matters of aesthetics and character. Rather it is indicative that there is overcrowding of wind farms (including but not limited to Morgan, Mona and Morecambe) in navigable waters which (as discussed above) will impact Stena Line and other stakeholders in an adverse way (i.e., increased collision and allision risks).	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA</p>
MOR_043_067_020 623	<p>Radar</p> <p>(a) Stena Line has some concerns arising out of the PEIR Submissions made in respect to the effect of high densities of high Wind Turbine Generators ("WTGs") on Marine Radar. PIANC WG 161 ('Interaction between offshore wind farms and maritime navigation') written by the Maritime Navigation Commission of the World Association for Waterborne Transport Infrastructure identifies potential radar interference from navigating in proximity to high density windfarms. Stena Line has additionally accessed pictures showing the effect on the radar of the P&O ferry MV Norbay caused by multipath echoes caused by the North Hoyle windfarm off the North Wales coast.</p>	A Radar Early Warning System (REWS) assessment has been undertaken and is presented in Radar Early Warning System Technical Report (Document Reference 5.2.17.2).
MOR_043_068_020 623	(b) Morecambe PEIR Chapter 16 at paragraph 16.202 states: "Aviation lighting fitted to offshore WTGs could cause confusion to the maritime community as the specification for the lighting to be displayed below the horizontal plane of the light filament itself could cause mariners some confusion. This confusion could result in WTGs with conflicting warning lighting representing a collision risk to maritime surface vessels." (emphasis added)	<p>An assessment of effects has been undertaken in Section 14.7 and Section 14.8 in Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), with Navigation risk assessed within the Navigation Risk Assessment (Document Reference 5.2.14.1).</p> <p>Aviation lighting is discussed in Section 16.3.3.3. The requirement for lighting to comply with Trinity House requirements, as appropriate, is embedded in the Project design and an Aids to Navigation Management plan would be agreed across aviation and marine navigation stakeholders.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_069_020 623	(c) Firstly, it is noted that this observation was not made in the corresponding Mona or Morgan Offshore Generation Assets PEIR Submissions, which creates concern as to whether the Mona and Morgan Offshore Wind Farms have taken this problem into consideration (and are therefore taking steps to mitigate the risks involved).	The Applicant has no further comment as feedback refers to the Mona Offshore Wind Project and the Morgan Offshore Wind Project Generation Assets.
MOR_043_070_020 623	(d) Secondly, Stena Line notes that any confusion as to the identity/purpose of a warning light poses a serious Navigation risk to all marine traffic, including Stena Line's vessels. It is paramount that a full consultation in respect of the use of lights on the WTGs is sought however, it is not clear as to who (if anyone) has been consulted on this point. More details are needed for Stena Line and the wider maritime community to provide input as to the safety of the new proposed aviation lighting. While it is acknowledged that the second round of Navigation Simulation exercises in May 2023 attempted to simulate the night-time visual effect of such an array of red warning lights, Stena Line notes that it would be unrealistic to expect any simulator to be able to provide a true visualisation of what this may look like in a real-world scenario.	Aviation lighting is discussed in Section 16.3.3.3 in Chapter 14 Shipping and Navigation (Document Reference 5.1.14). The requirement for lighting to comply with Trinity House requirements, as appropriate, is embedded in the Project design and an Aids to Navigation Management plan would be agreed across aviation and marine navigation stakeholders.
MOR_043_071_020 623	(e) Thirdly, Stena Line is concerned that navigation lights on the wind turbines may risk interfering with vessels' ability to identify other navigation lights and impact their ability to manoeuvre safely. The difficulty posed by background lights when navigating vessels at night is recognised by COLREGs Rule 6(iv).	Aviation lighting is discussed in Section 16.3.3.3 in Chapter 14 Shipping and Navigation (Document Reference 5.1.14). The requirement for lighting to comply with Trinity House requirements, as appropriate, is embedded in the Project design and an Aids to Navigation Management plan would be agreed across aviation and marine navigation stakeholders.
MOR_043_072_020 623	Climate Change (a) Stena Line acknowledges that the Wind Farms will likely have an overall beneficial effect in respect of climate change.	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_073_020 623	<p>(b) However, the figures estimated do not provide an accurate and complete assessment of the cumulative or individual impact of the Mona, Morecambe and Morgan Offshore Wind Farms on direct/indirect greenhouse gas emissions ("GHG Emissions"):</p> <p>(i) The GHG Emissions for the Transmission Assets for Morecambe and Morgan Wind Farms have not been considered in the assessments. There are GHG Emissions associated with the Transmission Assets for Morecambe and Morgan Wind Farms which should be considered in determining the overall GHG Emissions footprint and carbon payback periods (see Morecambe PEIR Chapter 21, paragraph 21.44).</p> <p>(ii) Indirect GHG Emissions have not been fully considered. Importantly, the increase in GHG Emissions resulting from the additional time spent by vessels (including Stena Line's vessels) in transiting the Wind Farm areas has not been considered. It appears that only GHG Emissions associated with the Wind Farms have been considered (i.e., GHG Emissions from vessels transporting materials to the Wind Farms) (see Morecambe PEIR Chapter 21, Table 21.9).</p> <p>(iii) There have been no cumulative assessments on the impact of the Mona, Morecambe and Morgan Offshore Wind Farms on direct/indirect GHG Emissions or the climate generally. This is particularly relevant where different phases of the projects are predicted to produce different levels of GHG Emissions (i.e., as the construction phase of the Wind Farms are anticipated to produce the most direct GHG Emissions (see, for example, Morecambe PEIR Chapter 21, paragraph 21.57)), this means that there may be a cumulative adverse impact for a significant period across the projects before any cumulative net benefit is seen. It is impossible to make an assessment on this point given that insufficient information is available on the Morgan and Morecambe Transmission Assets (see Morgan PEIR Chapter 17, paragraph 17.13.1.2).</p>	<p>The GHG assessment has been updated for the ES to consider the combined GHG emissions arising from the Transmission Assets, for the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm. The Project's whole lifecycle impacts combined with the Transmission Assets are presented in Section 21.7.1.5 in Chapter 21 Climate Change (Document Reference 5.1.21).</p> <p>The GHG assessment within this chapter considered emission sources directly associated with the Project. However estimates of GHG emissions associated with vessel deviations are included for information.</p>
MOR_043_074_020 623	<p>(c) Stena Line is committed to reducing its emissions both onshore and at sea and invests in clean energy technology. The increased time it will take for Stena Line to perform its routes (in normal and adverse weather conditions) as a result of the footprint of the Wind Farms will lead to increased GHG Emissions and will be counter-productive to Stena Line's current policies, and the purpose and intent of the Wind Farms.</p>	<p>The Applicant notes your response. The potential for increased fuel consumption and emissions associated with increased transit distance is acknowledged in the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) and Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and within our updated assessments.</p>
MOR_043_075_020 623	<p>(d) This increase in GHG Emissions is not anticipated to be insubstantial. Indeed, in considering increased shipping movements in respect of vessel movements related solely to the operation and maintenance of an example windfarm, the Morecombe PEIR suggests that these movements alone contribute 14.3% to total GHG emissions of the example windfarm (Morecambe PEIR Chapter 21, paragraph 21.16).</p>	<p>The Applicant notes your response. The potential for increased fuel consumption and emissions associated with increased transit distance is acknowledged in the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) and Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and within our updated assessments.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_076_020 623	(e) Inaccurate GHG Emissions statistics make it impossible to assess the efficacy of the Wind Farms and their net climate benefit.	Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.
MOR_043_077_020 623	Socio-economics (a) Stena Line reserves the right to comment further in respect to the Morgan and Morecambe Transmission Assets before it can comment substantively on any socio-economic impacts that may impact Stena Line's operations.	Further information is presented in Chapter 20 Socioeconomics, Tourism and Recreation (Document Reference 5.1.20) and Chapter 23 Summary: Generation and Transmission Assets Assessment (Document Reference 5.1.23).
MOR_043_078_020 623	Human Health Assessment (a) Stena Line notes that there is insufficient information in respect of the cumulative impact of the Mona, Morecambe and Morgan Offshore Wind Farms on Human Health deriving from Navigation risks or otherwise, to be able to make a cumulative effects assessment ("CEA") (see Mona PEIR Chapter 30 at paragraph 30.11.1.10, Morecambe PEIR Chapter 19 at paragraph 19.190). Although, it is queried why Morgan Offshore Wind Project Generation Assets has not included a similar reservation (see Morgan PEIR Chapter 19 at paragraph 19.10).	Following statutory consultation and publication of the PEIR, our assessments have been updated and presented in Chapter 19 Human Health (Document Reference 5.1.19) and Appendix 6.1 CEA Project Long List (Document Reference 5.2.6.1).
MOR_043_079_020 623	(b) It is understood that the CEA for the Wind Farms will be contained within the Environmental Statement health chapter submitted in support of the application for Development Consent (see Mona PEIR Chapter 30 at paragraph 30.11.1.10, Morecombe PEIR Chapter 19 at paragraph 19.193).	Chapter 19 Human Health (Document Reference 5.1.19) has had regard for cumulative effects, A cumulative assessment of the public health implications is presented in Section 19.7 in Chapter 19 Human Health, which takes into consideration the cumulative effects discussed in the other technical chapters of the ES, including detailed information on cumulative effects presented within Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Appendix 6.1 CEA Project Long List (Document Reference 5.2.6.1).
MOR_043_080_020 623	(c) It is therefore not possible to fully comment or appreciate the collective impact of the Wind Farms at this stage, save that it is noted that the potential cumulative impact: (i) on commercial operators (including strategic routes and lifeline ferries) is considered to be "moderate adverse"; (ii) on adverse weather routeing is considered to be "major adverse"; (iii) to vessel collision risk is considered to be "major adverse"; and (iv) on allision risks to vessels is considered to be "moderate adverse" (see Morgan PEIR Chapter 19 at paragraph 19.10.2.1, Mona PEIR Chapter 30 at paragraph 10.11.2.1).	The Applicant notes your response.
MOR_043_081_020 623	The Mona PEIR Submissions also suggest that there may be adverse cumulative impact to essential recognised sea lanes and access to ports and harbours (see Mona PEIR Chapter 30 at paragraph 10.11.2.1), which is not reflected in the corresponding PEIR Submissions made in respect of the Mona and Morecambe Wind Farms	Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Disruption to ferry operations and potential impacts have been considered cumulatively in Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p> <p>The Applicant has engaged directly with Stena Line, including a meeting on the 22 February 2024 to discuss residual concerns.</p>
MOR_043_082_020 623	(e) The impact of the above is stated to have the potential to be "influential in widening health inequalities" as a result of "ongoing and more frequent disruption in access to goods and services and increased shipping risk" (Mona PEIR Chapter 30, paragraph 30.11.2.8). It is thought to be of moderate adverse significance if unmitigated (se Mona PEIR Chapter 30, paragraph 30.11.2.6).	Chapter 19 Human Health (Document Reference 5.1.19) has had regard for cumulative effects, A cumulative assessment of the public health implications is presented in Section 19.7 in Chapter 19 Human Health, which takes into consideration the cumulative effects discussed in the other technical chapters of the ES, including detailed information on cumulative effects presented within Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Appendix 6.1 CEA Project Long List (Document Reference 5.2.6.1).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_083_020 623	(f) There is the potential for adverse effects associated with shipping's access to human health, when Mona, Morecambe and Morgan are considered together. The Morecombe PEIR Chapter 19 at paragraph 19.193 states: "Discussions between the projects developers is ongoing to develop measures to avoid Navigation impacts that could constitute a likely significant effect for public health" (emphasis added).	Chapter 19 Human Health (Document Reference 5.1.19) has had regard for cumulative effects, A cumulative assessment of the public health implications is presented in Section 19.7 in Chapter 19 Human Health, which takes into consideration the cumulative effects discussed in the other technical chapters of the ES, including detailed information on cumulative effects presented within Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Appendix 6.1 CEA Project Long List (Document Reference 5.2.6.1).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_084_020623	<p>(g) As stated above, Stena Line's concerns are that the shipping risks are not going to be properly mitigated effectively or properly. To emphasise, Stena Line provides a lifeline ferry service to several communities. In particular, Stena Line's concerns in respect of overcrowded shipping lanes and the associated increased collision and allision risks, which will in turn affect human health, are restated.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Disruption of ferry operations and potential impacts have been considered cumulatively in Chapter 19 Human Health (Document Reference 5.1.19).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_085_020 623	(h) Stena Line requires further details to be provided as to the mitigation steps being taken to reduce the impact of human health, particularly where there is an increased risk of fatalities and injuries during navigation, to make an informed opinion and position.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Disruption of ferry operations and potential impacts have been considered cumulatively in Chapter 19 Human Health (Document Reference 5.1.19).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_086_020 623	<p>MITIGATION</p> <p>10.1 Stena Line welcomes mitigation efforts to ensure the impact on its routes and operations are minimised. This include realigning the Morecambe site west boundary to minimise impacts on Stena Line's vessel routes, which are vulnerable to other market options available to its customers as a result of longer voyage times (see Morecambe PEIR Chapter 14, section 14.124 and Appendix 14.1, Table 42).</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA has been undertaken on behalf the Project. Key stakeholders, including Stena Line, participated in the NRA hazard workshop had the opportunity to input into the hazard scoring process. The NRA concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_087_020 623	10.2 As noted in section 8.2 above however, the control risks and proposed mitigation measures to address the unacceptably high risks to navigation safety are not properly detailed and do not contain a proper plan for implementation.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA has been undertaken on behalf the Project. Key stakeholders, including Stena Line, participated in the NRA hazard workshop had the opportunity to input into the hazard scoring process. The NRA concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_088_020 623	<p>OTHER INTERESTED PARTIES</p> <p>11.1 Alongside Stena Line, regional ferry operators that have been involved throughout the consultation period are Isle of Man Steam Packet, Seatruck Ferries and P&O. However, as recognised in the PEIR, Stena Line is the ferry operator most impacted by the footprint of the Wind Farms and will likely see its routes affected the most. Based on the forums attended by Stena Line's representatives, it is understood that these ferry operators share many of the same concerns as Stena Line. These include the Navigation risk posed by the Wind Farms (in particular when considered cumulatively), the safety of passengers and crew, the impact on ferry routes (including delays and increased costs) and a consequent adverse impact on customer satisfaction (for example due to longer transit routes and more frequent cancellations). Stena Line also calls on the Project Consortia to prioritise the concerns raised by the UK Maritime and Coastguard Agency (MCA) and the UK Chamber of Shipping.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_089_020 623	<p>11.2 Commercial fisheries operators also share many of the same concerns as Stena Line. These include the concern for spatial squeeze on fishing vessels due to changes in ferry routeing as a result of the footprint of the Wind Farms (see Mona PEIR, Chapter 11, section 11.1, Morgan PEIR Chapter 11, pages 39-40).</p>	<p>The cumulative assessments on fishing vessel spatial squeeze is presented in Chapter 13 Commercial Fisheries (Document Reference 5.1.13) and Chapter 14 Shipping and Navigation (Document Reference 5.1.14).</p>
MOR_043_090_020 623	<p>11.3 It is particularly noteworthy that many types of vessel traffic are expected to increase in the short to medium term in the region. Given the expected operational life of the Wind Farms is around 35 years, the risk assessments need to account for not just the current interested parties but whether these will increase over the years.</p>	<p>Section 7 of the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) considers the future traffic profile. As there is limited information available to determine what the increased traffic will be, it is not possible to identify future interested parties. The Applicant has committed to continued engagement with shipping and navigation stakeholders through the Marine Navigation Engagement Forum.</p>
MOR_043_091_020 623	<p>11.4 The Morecambe PEIR acknowledges that national port traffic is forecast to grow in the long term with unitised freight (including Ro-Ro vessels) "forecast to grow strongly, driven by economic growth" (see Morecambe PEIR Chapter 14, section 14.95). Further, the Port of Liverpool has invested in shoreside infrastructure to better handle larger vessels capable of carrying more cargo, demonstrating their particular growth intention.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_092_020 623	<p>CONCLUSION</p> <p>12.1 Stena Line reiterates that it is not opposed in principle to the development and construction of the Wind Farms and recognises the consultations that have so far taken place. However, the PEIRs have not settled all concerns that Stena Line and other stakeholders have raised.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_093_020 623	12.2 In particular, the Navigation Risk Assessment concludes that the construction as currently planned renders unacceptably high-risk scores. This is especially alarming for Stena Line, as a high and unacceptable risk of collision between passenger / ferry vessels and other commercial vessels was found.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_094_020 623	12.3 The mitigation measures identified have not been implemented and Stena Line notes that many lack detail or practical enforcement.	<p>Mitigation measures are set out within Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and NRA (Document Reference 5.2.14.1) and within the Schedule of Mitigation (Document Reference 5.5).</p> <p>A draft Deemed Marine Licence (DML) (schedule 6 within the Draft DCO (Document Reference 3.1)) is submitted as part of the Application. These measures would be secured through the draft DCO. Enforcement on these measures would fall to the relevant authority, such as the MMO. The MMO, in consultation with relevant stakeholders, would discharge the conditions and subsequent inspections of enforcement of conditions under the Deemed Marine Licence.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_095_020 623	<p>12.4 Stena Line provides a lifeline service to local communities and is fully committed to continuing to operate its routes. However, there is a real concern that the impact of the Wind Farms, as currently set out in the PEIR, on Stena Line's operations by bringing significant additional operational challenges and operating costs to the services it provides which in turn may affect its freight and passenger customers and the communities they serve and reside in.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_096_020 623	<p>Analysis of the deviations required by the cumulative effect of the proposed development of the Morgan, Mona, Morecambe and Orsted Windfarms on Stena Lines Belfast to Liverpool services. Passage North of the Isle of Man. This screen capture from the ECDIS of one of our EFlexer vessels shows the deviations required for our Belfast to Liverpool route when routing North of the Isle of Man. The red hatched line shows the vessels current direct route. This screen capture from the ECDIS of one of our EFlexer vessels shows the deviations required for our Belfast to Liverpool route when routing South of the Isle of Man. The red solid line shows the vessels current direct route.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_043_097_020 623	<p>Notes :</p> <ul style="list-style-type: none"> • These passage plans are based on the reduced footprint for Morgan and Mona as proposed by the consortia. • The footprint for Morecambe however is plotted, as submitted in the PEIR, since the site location for the Morgan – Morecambe Transmission assets, booster station is still to be selected and therefore should the most North Westerly edge of the Morecambe Windfarm be chosen then the benefit from the proposed reduced boundary would be negated from a deviation perspective. 	<p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>The development of the site layout for the Project remains ongoing. The site layout plan would be submitted to the MMO, in consultation with the relevant stakeholders.</p> <p>The proposed booster station for the Morgan Offshore Wind Project would be submitted as part of the Transmission Asset project, which is subject to a separate application. The Applicant has no further comment on this point.</p>
MOR_043_098_020 623	<p>The Orsted Windfarm is also plotted as Stena Line have been reliably informed by the developer that this project will proceed and that the Scoping Document will be submitted in Q4 – 2023. As such this should therefore be regarded as an adjacent transboundary project.</p>	<p>The Applicant notes your response. The Mooir Vannin Wind Farm has been considered as part of our assessments and presented in Chapter 14 Shipping and Navigation (Document Reference 5.1.14).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_043_099_020 623	<p>The following tables analyse the estimated additional bunker fuel consumption and cost for Stena Line vessels operating on scheduled services in the area. It does not factor in the additional cost in time on passage, maintenance due to additional running hours on engines, the cost of lubrication oil and sundries or the effect on vessels. It uses the same thirty-five-year time frame as used by the consortia for calculating Navigation risk. While the focus in the PEIR's is on the individual deviations around individual projects Stena Line must look at the cumulative impacts on its business over the life expectancy of the project. In summary the cost to Stena Line in additional fuel alone over the thirty-five-year life expectancy of the project is c US\$ 10.3 Million</p>	<p>The Applicant notes your response. The potential for increased fuel consumption and emissions associated with increased transit distance is acknowledged in the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1) and Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and within our updated assessments.</p>
MOR_044_001_020 623	<p>Section 48 Consultation Response</p> <p>We write on behalf of Morecambe Wind Limited (MWL), the holder of the Generation Licence and the relevant consents for the West of Duddon Sands Windfarm ("West of Duddon Sands"), a joint Scottish Power Renewables and Orsted venture in response to your notification of a proposed application for a development consent order ("DCO") under section 48 of the Planning Act 2008. We write to register with you our interest in your proposal and in particular areas of potential interaction between your proposed development and West of Duddon Sands. Our response at this stage is based on Documents currently made available regarding your project and our response will develop as more information is made available including during application and examination stage and as we further consider the potential interaction between the projects. We are also engaging on the proposed Morgan and Mona wind farms and intend also to engage on the proposed Morgan and Morecambe Transmission Assets during statutory consultation.</p>	<p>The Applicant notes your response.</p>
MOR_044_002_020 623	<p>Introduction: Interaction between West of Duddon Sands and the Morecambe Offshore Wind Project</p> <p>West of Duddon Sands</p> <p>West of Duddon Sands is an operational offshore wind farm with capacity of 389 MW and 108 wind turbine generators. West of Duddon Sands holds a lease from the Crown Estate and operates pursuant to the below consents. West of Duddon Sands is expected to continue to operate to the full extent of its consents and licences, be maintained, and may in due course be upgraded and repowered, and will at some stage be decommissioned. Thus, any interactions and impact should be considered to be long-term and the various project stages of operation/maintenance, re-powering and decommissioning should be considered by the Morecambe Offshore Wind Project. In addition, it is important that during the long-term interaction of the projects, the West of Duddon Sands consents (including consent conditions) and any stakeholder agreements entered for the benefit of West of Duddon</p>	<p>The Applicant notes your response.</p> <p>Consideration of potential impacts to existing infrastructure, including West of Duddon Sands, has been assessed within relevant chapters of the Environmental Statement, as appropriate.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Sands are not adversely affected.</p> <p>N/A Section 36 Consent West of Duddon Sand Wind Farm Construction and Operation</p> <p>Operational Capacity 389 MW, 108 WTGs L/2012/00424/19</p> <p>Marine Licence West of Duddon Sand Wind Farm Construction and Operation.</p> <p>Operational Capacity 389 MW, 108 WTGs L/2018/00117</p> <p>Marine Licence West of Duddon Sands Pontoon (maintenance) Dredge Licence.</p> <p>Operational 1252 m3 per annum L/2015/00017</p> <p>Marine Licence Cable repair Operational Repair of intra-array cables L/2016/00294</p> <p>Marine Licence Operations and Maintenance activities Operational Removal of marine growth and/or guano, Replacement of corrosion protection anodes, Application of paint or other coatings, Modifications to J-tubes, Replacement of access ladders - major component replacement.</p> <p>Proximity The Morecambe Offshore Wind Project array area is expected to be 12.93km from West of Duddon Sands.</p>	
MOR_044_003_020 623	<p>Effect on energy yield of West of Duddon Sands and MWL's interests</p> <p>As set out, the proposed Morecambe Offshore Wind Project array is 12.93km from West of Duddon Sands. Due to this proximity, there is potential for the Morecambe Offshore Wind Project turbines to interfere</p>	<p>The Applicant has engaged with the developers of operational windfarms (Ørsted and Scottish Power Renewables), noting the items raised and would maintain engagement moving forward.</p> <p>Consideration of wake effects are presented in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>with wind speed or wind direction of West of Duddon Sands and thus cause a reduction in energy output from the West of Duddon Sands turbines. This requires to be accurately assessed, appropriate mitigation applied with any remaining adverse effects appropriately compensated for the duration of MWL's consents and licences.</p>	
<p>MOR_044_004_020 623</p>	<p>Navigation and shipping</p> <p>The area of the proposed Morecambe Offshore Wind Project has significant amounts of existing shipping activity. The information provided in the PEIR is not clear on the extent to which and the location within which vessel activity would increase during both the construction and operational phases. Given there is no information currently available on vessel routes or proposed construction or O+M ports, it is difficult to understand the potential risks to assets associated with the generation and transmission of electricity from West of Duddon Sands. It is noted that specific information about wind farm service vessels ("WFSVs") are provided in the PEIR including that there were 158 WFSVs transits per year passing "north/south between Liverpool and the offshore windfarms to the north", "21 of these tracks passed within 1nm of the north-eastern corner of the wind farm site". Windfarms to the north appear to potentially include West of Duddon Sands. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed. It is important that any solutions carefully consider existing consent conditions and agreements. We would also appreciate being given the opportunity to input into and participate in discussions around Navigation risks and mitigations. Our concerns relate to:</p> <ul style="list-style-type: none"> Navigation safety in the vicinity of West of Duddon Sands including Search and Rescue lanes Vessel Traffic Services (VTS) managed by the MCA Commercial routes Construction vessels and their proximity to existing assets (WTG locations, inter-array cables) Combined effects of existing windfarm/oil and gas vessel activity and the additional construction vessel activity. <p>This also applies to any survey and/or investigation work: it is therefore requested that proposed survey and outline construction programmes for the new project are shared with MWL and its shareholders and discussed as soon as possible.</p>	<p>Meetings have been undertaken with existing Irish Sea offshore windfarm developers to discuss the Project. Additionally, Orsted attended the Marine Navigation Engagement Forum (MNEF) and Navigation Risk Assessment (NRA)/ Cumulative Regional NRA hazard workshops.</p> <p>Details of the Project components and estimated vessel movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_044_005_020 623	<p>Physical interaction of projects</p> <p>It is very important that West of Duddon Sands and its associated transmission assets can always be accessed to allow for appropriate Operation and Maintenance work and, in due course, upgrading, re-powering and decommissioning activities. It would therefore be useful to understand all of the Morecambe Offshore Wind Project components and routes associated with the proposed works (including proposed transmission works) so that we can establish that access for West of Duddon Sands, including access for jack-up vessels and anchor patterns (etc.), will be maintained and that physical interactions can be avoided, or understood and appropriately mitigated.</p>	<p>The Applicant has engaged with the developers of operational windfarms, including Ørsted and Scottish Power Renewables, noting the items raised and will maintain engagement moving forward.</p> <p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is noted that that a decision on the construction and the operation and maintenance Port(s) would be made post-consent and existing windfarms would be considered when further developing navigation plans for the Project. Please refer to Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17) for further information, including information on mitigation measures to be adopted by the Project.</p>
MOR_044_006_020 623	<p>Helicopter activity</p> <p>It is difficult to quantify the level of impact helicopter usage during the construction and operation of the Morecambe Offshore Wind Project. It is noted that the PEIR highlights that there may be 2 helicopter supports completing 365 return trips during installation works. No heliport site(s) or transit route(s) have been identified within the PEIR Documentation. We would appreciate if more information on this could be provided so we can properly understand and respond to the potential impacts and mitigations being proposed.</p>	<p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is anticipated that during the construction and operation and maintenance phases helicopters would route from Blackpool Airport or Liverpool Airport, however this is indicative at this stage and subject to change.</p> <p>A meeting was held between Ørsted and Scottish Power renewables on the 8 November 2023 noting that further information would be provided when developed post-consent.</p>
MOR_044_007_020 623	<p>Emergency response</p> <p>We would be happy to discuss with you appropriate communication and collaboration between West of Duddon Sands, Morecambe Offshore Wind Project, and other nearby offshore wind developments in circumstances where emergency responses are required, for example in the event of accidents or pollution spills.</p>	<p>The Applicant notes your response. An Emergency Response and Cooperation Plan (ERCoP) would be drafted post-consent and lines of communications have been established with the Applicant and existing operational windfarms in the region.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_044_008_020 623	<p>Cumulative and in-combination effects of projects</p> <p>It is important to ensure that all environmental impacts of your project are properly and fully assessed including any potential cumulative or in combination effects with West of Duddon Sands. As an example, the impact upon Whooper Swan has been the subject of studies in relation to West of Duddon Sands and these studies have shown Whooper Swan transits through or close to your proposed development. Your Offshore Ornithology chapters has low confidence in the predicted impacts upon Whooper Swan. We would be happy to discuss with you the Whooper Swan studies, and your approach to potential cumulative or in combination effects, to help ensure a compliant assessment.</p> <p>We would also welcome the opportunity to discuss further the following cumulative and in-combination impacts:</p> <p>Cumulative and in-combination effects – these are an area of concern due to the nature of the increased development in a congested area of sea, particularly in relation to shipping and navigation, ornithology, and marine mammals, as well as seabed morphology Further displacement of fisheries and established co-existence relationships Wintering populations of pink-footed geese Herring gull and lesser black-backed gull relating to the Alt, Morecambe Bay and Martin Mere SPAs Breeding populations of the breeding populations of Max shearwater at the Rum, Skokholm and Skomer SPAs.</p> <p>The PEIR is also lacking with regard to the proposed approach when dealing with ongoing cumulative environmental monitoring and survey programmes, and MWL would welcome the opportunity to receive more information on this.</p>	<p>Cumulative and in-combination effects are considered and presented in Chapter 11 Marine Mammals (Document Reference 5.1.11), Chapter 14 Shipping and Navigation (Document Reference 5.1.14), Chapter 12 Offshore Ornithology (Document Reference 5.1.12), Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7) and Chapter 9 Benthic Ecology (Document Reference 5.1.9)</p> <p>The Applicant notes your comment on future discussions on the cumulative and in-combination impacts listed.</p>
MOR_044_009_020 623	<p>Finally, you will note that this representation has been made on behalf of Morecambe Wind Limited which is the entity that operates the West of Duddon Sands Windfarm, there is likely to be some confusion if your proposed windfarm retains the name Morecambe Offshore Windfarm.</p>	<p>The Applicant notes your response. The Applicant proposed to retain Morecambe Offshore Windfarm Ltd and will ensure our entity is clear through our communications.</p>

Unique Reference Identifier	Consultation response received	Applicant response
<p>MOR_045_001_020 623</p>	<p>The UK Chamber of Shipping Response to Morgan, Mona & Morecambe Offshore Wind Farms Preliminary Environmental Information Report Consultations</p> <p>Introduction</p> <p>The UK Chamber of Shipping (hereafter “the Chamber”) welcomes the opportunity to comment on the Section 42 Preliminary Environmental Information Report (PEIR) consultation for the aforementioned proposed developments. The Chamber is providing a singular response to the consultations for all three proposed developments as it is the cumulative impact of them that is of grave concern to the shipping industry with the resulting Navigation risk.</p> <p>The Chamber is the primary trade association for the UK shipping industry and its voice. The Chamber represents more than 200 members, operating in excess of 900 vessels equalling 18 million GT in capacity, trading around the UK and globally. Chamber members operate across the full breadth of the industry, including: containers, dry bulk and tanker trades; passenger transport, comprised of international and domestic cruise & ferry operators, including lifeline services; offshore supply and construction engaged in oil & gas and renewables; towage and specialist operations; along with professional service providers supporting the shipping industry.</p> <p>The Chamber is a firm advocate for the UK’s targets to decarbonise the country and reach net zero by 2050, a target the Chamber supports the UK Government in pushing the global shipping industry to also adopt. Offshore renewables will become a significant source of green energy and the Chamber supports the Government’s targets for offshore wind, whilst championing the vital role the ports and shipping industries play in enabling those targets to be achieved. The shipping industry and supporting ports are essential to facilitate the proliferation of offshore renewables throughout the lifespan of developments during construction, operation & maintenance, and decommissioning. In order to achieve the Government’s targets the planning and consultation system must support both the UK’s offshore renewable goals and the shipping industry to ensure that Navigation safety is not compromised nor economic contribution from the shipping industry jeopardised. This is a clear policy of the National Policy Statement for Renewable Energy EN-3 and it is apparent from the shipping and navigation related chapters of PEIR as presented, for example the risk ratings within the NRAs, that these projects would introduce unacceptable risks to safety and detrimental economic impacts upon key shipping services. On this basis the Chamber wishes to provide comment in a number of areas, highlight concerns, and call for further commitments to mitigate risk from the proposed developments.</p>	<p>The Applicant notes your response.</p> <p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
<p>MOR_045_002_020 623</p>	<p>Planning & Consultation Process The Chamber has engaged throughout and extensively with the planning and consultation process to date, representing the concerns of its member operators directly impacted, and holistically considering the cumulative impact to the shipping industry. The Chamber commends the establishment of the Maritime Navigation Engagement Forum (MNEF) as a regular means of collective engagement between stakeholders and strongly welcomed the approach taken in conducting Navigation Simulator exercises at HR Wallingford with the major impacted ferry operators as a means of simulating ferry crosses and analysing Navigation safety in differing climatic and traffic scenarios. Whilst there are caveats to the simulator exercises and some inaccuracies, nevertheless it was a positive undertaking and should be utilised for future developments. The results of the simulator exercises along with the risk ratings as calculated in the Cumulative Regional Navigation Risk Assessment (CRNRA) show that there are unacceptable risks to Navigation safety and that changes to the design envelope are required. The Chamber and other MNEF members were informed of specific and tangible changes to the Project Design Envelope (PDE) including Red Line Boundary (RLB) changes in January 2023. It is therefore highly frustrating and should be criticised that the developers have proceeded to progress to PEIR consultation showing a PDE and RLB for the array areas which are out of date and incorrect. Through this course of action, the developers are negating and demeaning one of vital public and formal consultation periods, and lessening the feedback that will be submitted by stakeholders who are aware of the incoming changes. For those stakeholders providing feedback who are unaware of the developers' commitments to redefine the PDE and RLB of the proposed developments, their valuable time is being wasted and the Chamber will be recommending the Planning Inspectorate to fully consider and appraise the validity of the entire Section 42 consultation for these developments given the out of date and incorrect data presented. The Chamber wishes to raise further concern regarding the validity of the second round of Navigation Simulator exercises presently being undertaken by the developer with the regular ferry operators in attendance. Whilst such exercises are being carried out to include the additional commitments from the developers and redefined RLBs as informed to the MNEF in January, they fail to consider any feedback and views that are submitted during the PEIR consultation process. The Chamber considers this a significant failing. The Chamber raised this very concern at the January 2023 Maritime Navigation Engagement Forum (MNEF), that to undertake the Navigation Simulator exercises prior to the completion of PEIR and analysis of the feedback submitted, could see important factors or impacts omitted and if so, invalidate the simulator exercises.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>The Applicant notes your comment on the MNEF. As part of the embedded mitigation, the Marine Navigation Engagement Forum would continue to facilitate information sharing and identification of additional risk.</p> <p>Feedback received following the publication of their PEIR and during statutory consultation and how the Applicant has had regard to the feedback is presented in the Consultation Report (Document Reference 4.1) and supporting appendices.</p> <p>Following engagement with the Isle of Man Steam Packet Company (IoMSPC), the simulation was rescheduled to a suitable time and to accommodate the attendance of the IoMSPC.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>The Chamber advocated at the time that all additional simulator exercises be undertaken post PEIR period and analysis, yet this recommendation has been overlooked. The Chamber is furthermore disappointed and frustrated that the developers have chosen to undertake the second series of Navigation Simulator exercises at a seasonal period of the year, when one of the key ferry operators impacted, Isle of Man Steam Packet, is operating at its busiest due to the Isle of Man TT festival. The TT festival brings tens of thousands of people to the Isle of Man and accordingly means the ferry operator is working at full capacity to ensure the safe and efficient transport of competitors, spectators and all of their accompanying vehicles and equipment. The dates of the TT festival are well known well in advance and to hold simulator exercises for that specific operator whilst they are at their busiest period of year, thereby putting them in a very difficult position in determining whether they are able to attend is deeply regrettable and should be criticised. The Chamber therefore calls upon the developer to find alternative dates for such an exercise which will allow the key Masters and officers to attend.</p>	
<p>MOR_045_003_020 623</p>	<p>Commercial and Environmental Impact As stated in Paragraph 2.6.162 of NPS EN-3 states: "Site selection should have been made with a view to avoiding or minimising disruption or economic loss to the shipping and Navigation industries." The above statement cannot be agreed with based on the proposed developments as presented at PEIR. The Irish Sea is utilised by several key lifeline ferry services, connecting the mainland to Northern Ireland, the Republic of Ireland and the Isle of Man. In some cases these routes have been in operation for nearly 200 years providing an essential supply link to island communities. These services operate to a schedule and disruption to their routeing, which already occurs to a degree of regularity due to severe adverse weather will only be further exacerbated through deviation and detour. Through disruption, passage times increase, and operators may face difficulty in maintaining published schedules on services. This would impact upon berthing times and occupation in ports, where berth space is limited. Furthermore, recognising the regular occurrence of adverse weather in the Irish Sea particularly during winter months, operators are required to regularly undertake weather routeing. Weather routeing is done for a variety of reasons, including vessel safety, cargo safety to mitigate risk of cargo shift, and most regularly for ferry services, passenger comfort and safety. The NRA identified that weather routeing in the area occurring with far more regularity than seen elsewhere in UK waters for regular scheduled services, and this should be given the utmost weight and importance when considering the impact of removing large areas of navigable sea room from use. In doing so, the proposed developments will remove one of the main mitigations that operators use to reduce</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>safety risk and improve passenger comfort. Without it, customer satisfaction is reduced with potential knock on commercial impact to alternative transport means. Scheduled RoRo services operate as part of a highly efficient just in time supply chains, with raw materials, semi-manufactured, and manufactured products repeatedly crossing borders as part of the production process. Disruption to schedules and delays have a detrimental impact upon wider supply chains, decreasing customer satisfaction, and leading shippers to consider alternative arrangements (where available), including repositioning or modal shift. Similarly turn-around times in ports are optimised for the loading and discharge of cargo units and cannot necessarily be shortened due to increased passage time. Any the increase in route length would require more fuel to be burnt, therefore resulting in significant additional financial cost to the operator from the deviation whilst increasing environmental emissions. It should be noted that ships are designed to sail at specific speeds at which they are most efficient, operating them out of such parameters increases costs, inefficiency and may not be technically feasible due to the introduction of specific environmental legislation to the shipping industry, in particular Carbon Intensity Indicators (CII) and Energy Efficiency existing ship Index (EEXI). Vessel operators may therefore may not have the opportunity to increase speeds to maintain schedules but forced to disrupt them with knock-on effects to the wider supply chain. Such impacts the Chamber does not consider having been examined in detail not mitigations proposed through the Documentation as presented at PEIR.</p>	
<p>MOR_045_004_020 623</p>	<p>Cumulative Impact The Chamber asserts that the CRNRA as presented is incomplete and inaccurate. The most clear and obvious omission is that of the proposed Isle of Man Wind Farm proposed by Orsted within the territorial waters of the Isle of Man. As raised at the Navigation Risk Assessment workshops by the Isle of Man Government representative, Orsted have every intention of proceeding with the proposed development yet the analysis shown at PEIR fails to consider this and the routeing and Navigation safety implications. As such the Chamber expects the development will be included in the cumulative assessment going forward.</p>	<p>Due to the release of the Scoping Report for the Mooir Vannin Offshore Wind Farm in October 2023, after the completion of many of the activities undertaken to inform the CRNRA, an addendum to the CRNRA was prepared to consider the additional cumulative risks that might result to vessel traffic identified within the CRNRA (Document Reference 5.2.14.2). While unacceptable cumulative Navigation risks were identified when also considering the proposed Mooir Vannin Offshore Wind Farm, the Project is not considered to contribute to these high-risk areas.</p>
<p>MOR_045_005_020 623</p>	<p>Conclusion The Chamber welcomes this opportunity to respond to the Section 42 PEIR consultation however reiterates its assertion that the proposed developments fail to satisfy Paragraph 2.6.147 of EN-3, which states, "To ensure safety of shipping, it is Government policy that wind farms should not be consented where they would pose unacceptable risks to Navigation safety after mitigation measures have been adopted." The Chamber and its members look forward to engaging with the developers to appraise the additional commitments and risk mitigations</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>and their impact to Navigation safety, economic impact to the shipping industry and wider supply chains, and environmental impact. Therefore, whilst the Chamber is in overall support for offshore wind developments, it can only presently object to the developments as proposed in the PEIR Documentation.</p>	<p>the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
<p>MOR_046_001_040 623</p>	<p>Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>As already identified in the Civil and Military aviation and radar report the development of the off shore windfarm will have an impact on the Minimum safety altitude currently used by Blackpool Airport. It is also likely that the development will have an impact on current and planned instrument flight procedures (IFPs) to Blackpool Airport. The airport seeks reassurance that the development of the offshore project will not impact the MSAs and/or current or planned IFPs.</p>	<p>Construction heights would be below the maximum tip heights of the WTGs. Consultation has been undertaken by the Applicant throughout the pre application process regarding impacts to Blackpool Airport's IFPs and the mitigation required. It has been agreed that the impact identified in Appendix 16.2 (Document Reference 5.2.16.2) can be mitigated by amending the current IFPs. On 19th April 2024, Blackpool Airport provided the Applicant with a draft Statement of Intent outlining this agreement and the steps that the Applicant would have to complete in order that the mitigation can be implemented ahead of the construction phase of the proposed development. The Applicant continues to work with Blackpool Airport to finalise the Statement of Intent. The impacts on Blackpool Airport's IFPs are discussed in Sections 16.5.2.2 and 16.6.2.2 and set out in detail in Appendix 16.2.</p> <p>The impacts on Blackpool Airport's IFPs are discussed in Sections 16.5.2.2 and 16.6.2.2 of Chapter 16 Civil and Military Aviation and Radar (Document Reference 5.1.16) and set out in detail in Appendix 16.2.</p>
<p>MOR_047_001_040 623</p>	<p>Liverpool Airport notes that 16.147 of Volume 1 Chapter 16 of the Preliminary Environmental Information Report shows that there is a possibility of one or two turbines of maximum blade tip height 351m AMSL being detected by Liverpool Airports PSR. Liverpool Airport requests that further consultation is carried out with the Airport to confirm the exact effect and any mitigation required.</p>	<p>Consultation has been undertaken by the Applicant throughout the pre application process. Liverpool Airport was requested to confirm whether they agree with the findings of Appendix 16.1 (Document Reference 5.2.16.1) and Appendix 16.3 (Document Reference 5.2.16.3) which identified that there would be no adverse impact on the airport's IFPs or ATC PSR. Liverpool Airport responded on 19th April 2024 confirming that they have no objections to the proposed development. Further detail on Liverpool Airport is provided in Section 16.5.2.5, Appendix 16.1 and Appendix 16.3.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_048_001_040 623	<p>To whom it may concern, This letter is in response to the consultation on the Morecambe Offshore Wind Farm Preliminary Environmental Information Report (PEIR) consultation. The National Federation of Fishermen’s Organisation (NFFO) represents the interests of over 500 commercial fishing businesses in England and Wales. The Welsh Fishermen’s Association (WFA) represents over 200 commercial fishing businesses in Wales. This response represents views from both the NFFO and WFA members. We are responding to this consultation as we feel that there are potential impacts to the commercial fisheries in the proposed area Commercial fisheries have existed in the proposed region for generations and are already faced with extensive spatial restrictions such as existing and proposed offshore wind developments, Marine Protected Areas and legislative restrictions in the region. The area is economically important to fishing fleets from all the devolved UK administrations, with a variety of gear types being deployed, both static and mobile. Further displacement of commercial fishing in the region will result in economic harm, through loss of earnings from the ground and additional operating costs due to increased steaming times during construction and operation of the project. The response below has been separated to specific concerns we have with regards to the Fish and Shellfish Ecology chapter and the Commercial fisheries chapter.</p>	<p>The Applicant notes your response. The Applicant would like to point you to Chapter 13 Commercial Fisheries (Document Reference 5.1.13) which details our assessments and proposed mitigation to any effects.</p> <p>With regards to displacement of commercial fishing in the region, the Applicant has committed to the development of and adherence to a Fisheries Liaison and Co-existence Plan (FLCP), in accordance with the Outline FLCP submitted with our application (Document Reference 6.4), that provides the mechanism to mitigate these effects.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_048_002_040 623	<p>Fish and Shellfish Ecology</p> <p>The following comments are in Reference to the Fish and Shellfish Ecology chapter of the PEIR, Volume 1, Chapter 10. A general concern within the PEIR is the lack of site-specific data used to characterise the baseline environment for fish and shellfish. The only site-specific data used that is not dated (by more than a decade in many cases) were MMO landings statistics and ICES/IBTS surveys, both of which the resolution is too coarse to characterise an accurate baseline. The use of data from other wind farm assessments feeds into the cycle of non-site-specific data being used to characterise a baseline, these data are either dated (one over 20 years old) or from sites some considerable distance from the Morecambe proposed area.</p>	<p>The data sources used have been broadly agreed through the Evidence Plan Process, with some requested additions, which are outlined below.</p> <p>The Applicant maintains that landings data at the level of ICES (International Council for the Exploration of the Sea) rectangle, averaged over five years, is sufficient to characterise the key species for the baseline for mobile commercial species in relation to the Project and also reduces the potential for interannual variations to skew the baseline. Highly mobile populations are better understood at a more regional scale and cannot be sufficiently characterised by site-specific survey snapshots.</p> <p>In addition, site specific benthic survey data was collected for the Project by Ocean Ecology Limited (OEL) in May/June 2022. The PSA data generated has been used to inform the baseline habitat suitability for sandeel and spawning herring, as presented in Section 10.5.4 of Chapter 10 Fish and Shellfish Ecology of the Environmental Statement (Document Reference 5.1.10).</p> <p>Further data on Basking shark sightings in the area has been included.</p> <p>Finally, the AFBI have provided the previous 10 years of NIHLS data, which have been used to generate a herring larvae heatmap to provide present-day context to the extent of the Isle of Man herring spawning ground, as discussed and agreed with Expert Topic Group members via the Evidence Plan Process. This is presented in Section 10.5.4 of Chapter 10 Fish and Shellfish Ecology of the Environmental Statement. The heatmap is overlaid with noise contours in Figure 10.6 (Document Reference 5.3.10).</p> <p>Therefore, as noted in Section 10.4.2 of Chapter 10 Fish and Shellfish Ecology of the Environmental Statement, it is considered by the Applicant, and agreed with stakeholders and their scientific experts, that sufficient publicly available information is available to undertake a robust assessment.</p>
MOR_048_003_040 623	<p>The reliance of offshore wind impact assessments on Coull et al., (1998) and Ellis et al., (2012) has been called into question in several of our responses to offshore developments. These data are over a decade old but seem to be used as a 'gold standard' to assess impacts on spawning and nursery grounds. If these data are to be used, Table 10.12 and Figures 10.2a – 10.3b highlight the importance of the Morecambe development area to gadoid, herring, plaice, and sole nursery grounds, all of which are shown to occur with high frequency in locations that overlap with the development area. However, the assessments of the impacts for all stressors state that there will be "minor/adverse" at worse, with no monitoring or mitigation suggested. This, in our opinion, calls into question the methodology used in the assessment. If there is an overlap of high intensity spawning/nursery areas, then surely some form of monitoring is needed to ensure there are no adverse effects on the ecology of these commercially important</p>	<p>The non-significant impacts assessed with respect to spawning and nursery grounds consider receptor sensitivity and impact magnitude, as required in the EIA Regulations (Section 10.4.3 of Chapter 10 Fish and Shellfish Ecology of the Environmental Statement (Document Reference 5.1.10)) and in line with guidance (Section 10.4.1). The assessment for nursery and spawning grounds takes into account the very broad extent of these mapped grounds in relation to the localised and temporary nature of many of the impacts assessed. Where impacts are likely to be longer term, such as Electromagnetic Field, embedded mitigation, such a cable burial to a target depth of 1.5m, is committed to. Taking into account the mitigation already proposed (Section 10.3.3), the sensitivity of receptors and magnitude of impacts, the Applicant maintains the assessed significance of effects.</p> <p>There is no current proposal to undertake post-construction monitoring, given that no impacts have been assessed as significant in EIA terms. The Applicant would remain</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>stocks. If such effects are found, mitigation would be needed. Having no form of mitigation for, or monitoring of these stocks is in contravention of NW-FISH 3 marine plan, that states “adverse impacts on essential fish habitat, including spawning, nursery and feeding grounds, and migratory routes, must demonstrate that they will, in order of pReference: a) avoid b) minimise c) mitigate -adverse impacts so they are no longer significant”. We find it difficult to accept that the assessment of the construction, operation and decommissioning of a major energy infrastructure project has not identified a single impact to a receptor above “not significant”.</p>	<p>in dialogue with stakeholders, including nearby projects to discuss any regional or strategic projects that may be in planning that may assist in verifying EIA conclusions.</p>
MOR_048_004_040 623	<p>There is minimal site-specific and contemporary data used that can support the assessments made in this chapter. The use of data that is over a decade old in some cases, or from other developments a considerable distance beyond the assessment area, is not acceptable when characterising a site-specific baseline.</p>	<p>Data is considered suitable upon which to base the assessment. The limitations of data sources used have been noted (Section 10.4.6 of Chapter 10 Fish and Shellfish Ecology of the Environmental Statement (Document Reference 5.1.10)) and additions made which are outlined below:</p> <p>The Applicant maintains that landings data at the level of ICES (International Council for the Exploration of the Sea) rectangle averaged over five years is sufficient to characterise the key species for the baseline for mobile commercial species in relation to the Project, and also reduces the potential for interannual variations to skew the baseline. Highly mobile populations are better understood at a more regional scale and cannot be sufficiently characterised by site-specific survey snapshots.</p> <p>In addition, site specific benthic survey data was collected for the Project by Ocean Ecology Limited (OEL) in May/June 2022. The Particle Size Analysis (PSA) data generated has been used to inform the baseline habitat suitability for sandeel and spawning herring (Section 10.5.4).</p> <p>Further data on basking shark sightings in the area has also been included.</p> <p>Finally, the Agri-Food and Biosciences Institute (AFBI) have provided the previous 10 years of Northern Island Herring Landing Stats (NIHLS) data which have been used to generate a herring larvae heatmap to provide present-day context to the extent of the Isle of Man herring spawning ground, as discussed and agreed with ETG members. This is presented in Section 10.5.4 of Chapter 10 Fish and Shellfish Ecology of the Environmental Statement. The heatmap is overlaid with noise contours in Figure 10.6 (Document Reference 5.3.10).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_048_005_040 623	<p>Data was analysed from monitoring projects of other OWF developments, however the methodology used for these monitoring projects (e.g., otter or beam trawl) is not the correct methodology for sampling receptors that the data have been used to assess (e.g. shellfish). This incorrect use of data, from inappropriate methodologies, should be accounted for when assessing impacts to receptors. Acknowledging the limitations in the data but ignoring such and using it as concrete evidence, with no precaution used, misinforms the assessment of the impacts. This is done throughout this chapter and questions the validity of the impacts assessed.</p>	<p>Data is considered suitable upon which to base the assessment. The limitations of data sources used have been noted (Section 10.4.6 of Chapter 10 Fish and Shellfish Ecology of the Environmental Statement (Document Reference 5.1.10)) and additions made which are outlined below.</p> <p>In this Environmental Statement, the primary datasets used for baseline characterisation are landings data, stock assessments (e.g. Bloor et al., 2022) and site-specific Project datasets such as Particle Size Analysis (PSA) data from a site specific 2022 benthic survey.</p> <p>The baseline for herring spawning grounds and sandeel habitat is based on recent site-specific data (Section 10.5.4) and the most recent 10 years of AFBI NINEL herring larvae survey data, which has been used to produce a herring larvae heatmap Figure 10.6 (Document Reference 5.3.10).</p> <p>The limitations of datasets used are stated in Section 10.4.6. And further caveats for older datasets are now included in e.g. Table 10.5 and Section 10.4.6.</p> <p>Monitoring data from other offshore windfarm developments is not relied upon in the assessments.</p>
MOR_048_006_040 623	<p>We acknowledge the difficulties with the lack of site-specific, contemporary data, but we would expect to see some element of precaution taken when assessing impacts to fish and shellfish ecology, specifically when advised through inappropriate methodologies.</p>	<p>The limitations of datasets used are stated in Section 10.4.6, and further caveats for older datasets are now included in, e.g. Table 10.5 and Section 10.4.6 in Chapter 10 Fish and Shellfish Ecology of the Environmental Statement (ES) (Document Reference 5.1.10)). Data is considered suitable upon which to base the assessment.</p> <p>In this ES, the primary datasets used for baseline characterisation are landings data, stock assessments (e.g. Bloor et al., 2022) and site-specific Project datasets such as Particle Size Analysis (PSA) data from a site specific 2022 benthic survey.</p> <p>In addition, precautionary and Project-specific underwater noise modelling has been undertaken (Appendix 11.1), with Reference to established sound impact thresholds (Popper et al., 2004), and in the case of herring, a precautionary 135dB SELSS threshold for behavioural disturbance (Hawkins et al., 2004). All fish, larvae, and eggs have precautionarily been treated as stationary receptors in this modelling.</p> <p>The baseline for herring spawning grounds and sandeel habitat is based on recent site-specific data (Section 10.5.4) and the most recent 10 years of AFBI NINEL herring larvae survey data, which has been used to produce a herring larvae heatmap (Figure 10.6).</p>
MOR_048_007_040 623	<p>Commercial Fisheries The following comments are in Reference to the Commercial Fisheries chapter of the PEIR, Volume 3, Chapter 13 and the Commercial Fisheries Technical Report, Appendix 13.1. This chapter characterises the commercial fishing industry well and effort has been made to describe the fisheries using a variety of sources, there is however, a</p>	<p>The Applicant notes your response. Further stakeholder consultation has been undertaken since the publication of the Preliminary Environmental Information Report as outlined in the meetings presented in Chapter 13 Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13). Additional information gathered has been reflected in Appendix 13.1 Commercial Fisheries Technical Report (Document Reference 5.2.13.1) and Chapter 13 Commercial Fisheries of the</p>

Unique Reference Identifier	Consultation response received	Applicant response
	lack of stakeholder information used that has been presented for other developments in the region. However, there remain issues with how those data have been interpreted and used to assess the impacts to the diverse fishing fleets that are the current users of the area.	Environmental Statement within the impact assessment (Section 13.6) and Cumulative Effects Assessment (Section 13.7).
MOR_048_008_040 623	The PEIR only identified the static gear sector as requiring any form of mitigation. The impact to the diverse fishing activity of mobile gear types is assessed as minor adverse at worse, due to their ability to operate within the wind farm post construction or operate elsewhere. There is minimal evidence to date of mobile gear operating within other wind farm array areas. This will be compounded by the extensive, parallel offshore wind developments in the region, limiting the available fishing areas in the region. Therefore, it must be assumed that mobile gear fisheries will face a loss of earnings through loss of access to grounds and having to steam to new fishing grounds, this significant impact needs to be reassessed as part of the PEIR.	<p>The impact assessment as presented in Section 13.6 of Chapter 13 Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13) was informed by baseline data which indicated that the active fisheries within the windfarm site were focused on potting for whelk.</p> <p>The impact assessment in Section 13.6 during construction (when fishing vessels would be temporarily excluded from construction areas) also concluded a Project-alone minor adverse effect following mitigation for the UK potting fleet. The impact assessment (Section 13.6) and Cumulative Effects Assessment (Section 13.7) assessed impacts on a fleet-by-fleet basis including the mobile sectors.</p>
MOR_048_009_040 623	It is welcomed that fisheries a Fisheries Liaison and Co-Existence Plan will be developed with stakeholders. We would like to ensure that all relevant stakeholders can feed into this development, including the fishing fleets from devolved administrations that operate in the area. Whilst there is a commitment to follow FLOWW Guidelines (2014/5) for liaison and disruption agreements, these are under review, and we would like to see this acknowledged within the PEIR and a commitment made to follow the most up to date guidelines.	The Applicant notes your response. The Applicant is committed to following the procedures as outlined in the FLOWW guidance Documents (2014 and 2015; and future updates to this guidance). The Outline Fisheries Liaison and Co-Existence Plan (Document Reference 6.3) has been submitted with the DCO application. A Fisheries Liaison Officer has already been employed by the Project to engage with relevant fisheries stakeholders.
MOR_048_010_040 623	We feel that the assumption that displacement effects during construction for all the different fishing mobile gear sectors will be “negligible” is vastly overoptimistic. These are the dominant gear types used in the area, but the only mitigation discussed is for the static gear sector. The only justification for this seems to be that fishers can disperse into other areas. This is not the case, especially in regions such as this, with extensive existing offshore developments, alongside legislative and conservation restrictions and two other wind farm developments being constructed. Displacing a diverse fishing fleet into an already crowded marine space will have an impact on those fishing businesses that is likely to be far from negligible.	<p>The impact assessment for displacement within the Preliminary Environmental Information Report and within the Environmental Statement did not conclude negligible effects. The impact assessment presented in Section 13.6 of Chapter 13 Commercial Fisheries of the Environmental Statement found a Project-alone moderate adverse (pre mitigation) effect to the potting fleet for displacement during construction; and minor for all other fleets except pelagic which was negligible.</p> <p>The assessment (Section 13.6) is informed by the current levels of fishing activity. While scallop dredging is widespread in the region, activity is not focused across the windfarm site. The assessment remains valid.</p>
MOR_048_011_040 623	For the dredge sector, operating in the west of the development area, an estimated economic loss to businesses of ~15% (value derived from figures presented in 13.51 and 13.80) is considered during the construction phase as “minor adverse” and no mitigation suggested, this again contravenes the NW Marine Plan, NW-FISH-2, to avoid, minimise and mitigate with regards to commercial fisheries. Up to a 15% loss of revenue with no attempt to minimise or mitigate for impacts is not acceptable and will place those fishing businesses at risk.	<p>The impact to the dredge sector is presented in Section 13.6 of Chapter 13 Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13) and does not include a percentage calculation for economic loss. It is understood that this comment is of relevance to a different development within the region.</p> <p>The impact assessment (Section 13.6) found a Project-alone moderate adverse (pre-mitigation) effect to the potting fleet for loss of access due to displacement.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The Applicant has committed to the development of and adherence to a Fisheries Liaison and Co-existence Plan (FLCP), in accordance with the Outline FLCP submitted with our application (Document Reference 6.4), that provides the mechanism for evidence-based compensation for disturbance.</p>
MOR_048_012_040 623	<p>Use of non-site-specific studies (13.162) should be done with caution. The study presented here was site specific, and based in a region that was characterised by a very different benthic environment and regional fishery. Co-existence is site-specific and should not be assumed as environmental, fisheries type and drivers are all factors that influence whether co-existence can be achieved post construction. The commercial fisheries in the region will be expected to see a vastly changing landscape through the lifespan of the Morecambe project. The spatial squeeze on fisheries due to offshore developments in the region is already extensive in the Eastern Irish Sea and facing three developments running in parallel. There is also the likelihood of further restrictions with regards to the potential ban on all mobile gear within MCZs. There are also factors associated with the renegotiation of the Trade and Cooperation Agreement that will affect opportunities in the region. Whilst these elements are acknowledged in the PEIR as possible factors, they are not accounted for in the assessments.</p>	<p>The Cumulative Effects Assessment presented in Section 13.7 of Chapter 13 Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13) includes consideration of other windfarm developments and designated sites. This concludes a significant effect for the potting and scallop dredging fleets in relation to exclusion, displacement and resource effects. The Applicant has committed to the development of and adherence to a Fisheries Liaison and Co-Existence Plan, in accordance with the Outline Fisheries Liaison and Co-Existence Plan (Document Reference 6.3), that provides the mechanism for involvement in a potential regional commercial fisheries working group as well as monitoring of fishing activity data as presented in Section 13.11 of Chapter 13 Commercial Fisheries of the Environmental Statement.</p>
MOR_048_013_040 623	<p>It is recognised that the PEIR attempts to characterise a commercial fisheries baseline by analysing many different data sources to describe and analyse the commercial fisheries impact, however including stakeholder expertise can enhance the understanding of commercial fisheries further. The limitations of the data are well understood and described, with confidence levels assigned to the different data sources. However, the assumptions made, and subsequent impacts assessed from these data, do not seem to be influenced by their pedigree or the confidence levels assigned, leading to a “minor/negligible” or “no significant effect” in all cases.</p>	<p>The impact assessment presented in Section 13.6 of Chapter 13 Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13) identified significant Project-alone effects during the construction phase (for potting exclusion and displacement) that require additional mitigation to reduce the residual impact to ‘minor adverse’.</p> <p>The Cumulative Effects Assessment presented in Section 13.7 identified significant effects for potting and scallop dredge fleets based on reduced access, displacement and scallop resource impacts. The Applicant has committed to the development of and adherence to a Fisheries Liaison and Co-Existence Plan, in accordance with the Outline Fisheries Liaison and Co-Existence Plan (Document Reference 6.3), that provides the mechanism for the involvement in a potential regional commercial fisheries working group, as well as monitoring of fishing activity as presented in Section 13.11.</p>
MOR_048_014_040 623	<p>Many of our concerns may be offset by sufficient monitoring of impacts to receptors, however details on such are lacking from the PEIR, only a commitment to develop an IPMP is stated (13.263). Additionally, synergising assessments from neighbouring Round Four wind farm developments (that have assessed the impacts to the regions commercial fisheries very differently) will further aid in truly assessing impacts and mitigating for such.</p>	<p>The Applicant has committed to the development of and adherence to a Fisheries Liaison and Co-Existence Plan, in accordance with the Outline Fisheries Liaison and Co-Existence Plan (Document Reference 6.3), that provides the mechanism for the involvement in a potential regional commercial fisheries working group, as well as monitoring of fishing activity as presented in Section 13.11 of Chapter 13 Commercial Fisheries of the Environmental Statement.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Given that fish are highly mobile, both temporally and spatially, a site-specific survey only provides coverage of the species present in a particular area at a particular time. This has the potential to skew the baseline, which has been agreed through the Evidence Plan Process with stakeholders. No monitoring is proposed in relation to fish and shellfish ecology. This is on account of the outcomes of the assessment, which has concluded that all of the potential impacts considered would result in either no or, at worse, minor adverse effects.</p> <p>However, the Applicant would remain in dialogue with stakeholders, including nearby projects to discuss any regional or strategic projects that may be in planning that may assist in verifying EIA conclusions.</p>
MOR_048_015_040 623	In fisheries management, a precautionary principle is employed where there is uncertainty or a paucity of relevant data. This does not seem to be the case for impact assessments. Limitations of data are acknowledged but do not seem to influence the outcomes of assessed impacts, a flaw in the methodological design and interpretation.	<p>The process behind the Project's EIA assessment methodology is presented in Chapter 6 EIA Methodology (Document Reference 5.1.6).</p> <p>Given that fish are highly mobile, both temporally and spatially, a site-specific survey only provides coverage of the species present in a particular area at a particular time. This has the potential to skew the baseline, which has been agreed through the Evidence Plan Process with stakeholders. No monitoring is proposed in relation to fish and shellfish ecology. This is on account of the outcomes of the assessment, which has concluded that all of the potential impacts considered would result in either no or, at worse, minor adverse effects.</p> <p>However, the Applicant would remain in dialogue with stakeholders, including nearby projects to discuss any regional or strategic projects that may be in planning that may assist in verifying EIA conclusions.</p>
MOR_048_016_040 623	Whilst we appreciate the difficulties in assessing impacts with limited data sources, we feel that the analysis is affected by these shortcomings, and this needs to be accounted for in the methodology. The development of the Morecambe Offshore Wind farm will have an impact on the diverse fishing fleets operating in the area, this PEIR underestimates these impacts on nearly every receptor assessed.	<p>Given that fish are highly mobile, both temporally and spatially, a site-specific survey only provides coverage of the species present in a particular area at a particular time. This has the potential to skew the baseline, which has been agreed through the Evidence Plan Process with stakeholders.</p> <p>However, the Applicant would remain in dialogue with stakeholders, including nearby projects to discuss any regional or strategic projects that may be in planning that may assist in verifying EIA conclusions.</p> <p>The impact assessment presented in Section 13.6 of Chapter 13 Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13) identified significant Project-alone effects during the construction phase (for potting exclusion and displacement) that require additional mitigation to reduce the residual impact to 'minor adverse'.</p> <p>The Cumulative Effects Assessment presented in Section 13.7 identified significant effects for potting and scallop dredge fleets based on reduced access, displacement and scallop resource impacts. The Applicant has committed to the development of and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		adherence to a Fisheries Liaison and Co-Existence Plan, in accordance with the Outline Fisheries Liaison and Co-Existence Plan (Document Reference 6.3), that provides the mechanism for the involvement in a potential regional commercial fisheries working group, as well as monitoring of fishing activity as presented in Section 13.11.
MOR_049_001_040 623	<p>Response to the Morecambe Offshore Windfarm Statutory Public Consultation</p> <p>We note that you are currently undertaking public consultation on the proposed Morecambe Offshore Windfarm Nationally Significant Infrastructure Project (NSIP). This letter constitutes Scottish Power Renewables (WODS) Limited's (SPR WoDS) response to that consultation. SPR WoDS is one of the shareholders of the West of Duddon Sands Offshore Windfarm (WoDS). WoDS is an NSIP for which development consent was granted in September 2008. The Order grants consent for electricity generation with an installed capacity of up to 500MW. Given this, SPR WoDS would request that both it and Morecambe Wind Limited (as the operator of WoDS) are each treated as Interested Parties and included in all future consultations in relation to this project.</p>	The Applicant notes your response.
MOR_049_002_040 623	SPR WoDS recognises the importance of the proposed Morecambe Offshore Windfarm development, however it is imperative that the works do not compromise the operation of WoDS which is already delivering substantial renewable energy benefits and is contributing to meeting the national need for renewable energy identified and committed to by the UK Government. Due to the close proximity of the proposed development project, SPR WoDS initial comments in response to the statutory consultation are described below:	<p>The Applicant has engaged with Scottish Power Renewables noting the concerns raised.</p> <p>Consideration of potential impacts to existing infrastructure, including WoDS, has been assessed within relevant chapters of the Environmental Statement, as appropriate.</p>
MOR_049_003_040 623	<ul style="list-style-type: none"> The ongoing and uninterrupted operation of WoDS is priority, it is therefore requested that proposed survey and outline construction programmes for the new project are shared with Scottish Power Renewables UK Limited (SPRUK) and discussed as soon as possible 	<p>Consideration of potential impacts to existing infrastructure, including WoDS, has been assessed within relevant chapters of the Environmental Statement, as appropriate.</p> <p>The Applicant held a meeting with Scottish Power Renewables and Morecambe Wind Ltd on the 8 November 2023. This was a collective meeting with Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant welcomes future engagement with SPR WoDS.</p>
MOR_049_004_040 623	<ul style="list-style-type: none"> SPRUKL would like to request a meeting to understand the project(s) in greater detail and to discuss the potential impacts on: o Wake effects on existing developments and commercial compensation considerations 	The Applicant held a meeting with Scottish Power Renewables and Morecambe Wind Ltd on the 8 November 2023. This was a collective meeting with Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project.

Unique Reference Identifier	Consultation response received	Applicant response
		Consideration of wake effects are presented in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).
MOR_049_005_040 623	<p>SPR WoDS recognises the importance of the proposed works and the contribution the project will have in meeting the national need for renewable energy. We are keen to engage with Morecambe Offshore Windfarm and would welcome constructive discussions around the issues noted above and any other emerging topics that arise. It is requested that Morecambe Offshore Windfarm liaise with us.</p> <p>Please do not hesitate to contact us for further discussion or information requests.</p>	The Applicant held a meeting with Scottish Power Renewables and Morecambe Wind Ltd on the 8 November 2023. This was a collective meeting with Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project. The Applicant welcomes future engagement with SPR WoDS.
MOR_050_001_050 623	<p>Windfarm Generation and Transmission Assets Consultation Consultation Response</p> <p>Westmorland and Furness Council (the Council) welcomes the opportunity to provide comments on the Morecambe and Morgan proposed windfarms and transmission assets as part of the developer's non-statutory consultation process. Energy Excellence in the Westmorland and Furness. The Westmorland and Furness area is a recognised leader in nuclear and energy excellence and a home to high value manufacturing capability supported by a highly skilled workforce, leading R&D facilities and a skills pipeline tailored to industry needs. This international reputation is built on a longstanding history of project development and delivery that includes, nuclear submarine construction, gas extraction and processing, and renewable energy generation from the existing windfarms located off the Furness coastline. This reputation is further supported by the authority's track record of supporting and delivering major infrastructure projects. The breadth and complimentary nature of these projects, combined with longstanding energy experience has produced a strong skills base of professional and technical expertise, which can help drive forward a wide range of growth opportunities in the future, including offshore wind development.</p> <p>The Council is keen to identify and support opportunities and has an ambitious vision for green and inclusive growth, including providing leadership in the drive to become carbon net zero. The experience and expertise held within our community are significant assets that can be utilised in the successful delivery of major projects such as the Morecambe and Morgan windfarm developments, helping to create a green energy network. The Cumbria Local Enterprise Partnership's (CLEP) Clean Energy Strategy seeks to develop energy assets to support local, regional and national objectives for decarbonisation, green growth and levelling up. The strategy identifies the potential for further offshore windfarms off the coast of Barrow and the importance of</p>	<p>The Applicant notes your response.</p> <p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection will be made post consent.</p> <p>The Applicant has submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11). Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>these in delivering against the UK's clean energy targets. It also draws attention to the area's specialist capabilities in delivering this and the ambition for ports like Barrow to provide the Operation and Maintenance hubs for the growing capacity. In addition, the strategy highlights the significant potential for electrolytic hydrogen generation from offshore wind in the Irish Sea, highlighting the possible use of hydrogen generation as a means of providing flexible storage and/or for use by our large industrial consumers, as well as the potential for transport hubs associated with the M6 and West Coast Mainline.</p>	
<p>MOR_050_002_050 623</p>	<p>Connectivity Westmorland and Furness is well connected to the rest of the UK through the M6 motorway and West Coast Main Line railway, including Scotland and North-East of England. The dualling of the A66 road between Penrith and Scotch Corner will further enhance these links. The area is served by Barrow Port, which is located in the south-west of the authority's area, on the Furness peninsula. Barrow Port has strong capabilities and is already established as the operation and maintenance hub for the existing offshore windfarms in the Irish Sea. Barrow benefits from strategic connectivity, linking sea to road and rail routes and providing access to large supply chains in the marine and energy sectors. It is ideally located and equipped to support the Morecambe and Morgan project and should be considered integral to its delivery. The Council suggests that a similar approach to that currently taken by the Scottish Government and Crown Estate Scotland would be appropriate in this instance. The Scottish approach requires offshore wind developers to consider and agree supply chain commitments early in the development process, with the intention of ensuring wind farm developments realise maximum economic benefits for local areas through the local supply chain.</p>	<p>The Applicant notes your response. The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection will be made post consent. The Applicant would like to point you to the Outline Skills and Employment Plan, which has been submitted as part of the DCO application (Document Reference 6.11). The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
<p>MOR_050_003_050 623</p>	<p>Transport There does not appear to have been an assessment of the onshore transport movements and potential impacts associated with construction of the offshore components of the project. Quarried rock and other construction materials will be needed in large quantities and if sourced from local suppliers would need to be transported by road or rail to a suitable port, potentially Barrow. This could have significant impacts upon local roads, but has not been assessed. Whilst experience with previous offshore windfarms has not resulted in such impacts upon Westmorland and Furness, without clarity on where large volumes of construction materials will be sourced, it cannot be ruled out. Provision was made in the Walney Extension Development</p>	<p>Consultation with regard to traffic and transport has been undertaken in line with the general process described in Chapter 6 EIA Methodology (Document Reference 5.1.6). The feedback received throughout this consultation process has been considered in preparing the ES. The key elements to date pertinent to traffic and transport is presented in Chapter 22 Traffic and Transport of the Environmental Statement (Document Reference 5.1.22).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Consent Order for managing potential impacts relating to transport of materials to port and this should be considered for Morecambe and Morgan.</p>	<p>A Port Access and Transport Plan would need to be approved by the local highway authorities as set out as a requirement in the draft DCO in the unlikely event that major windfarm components are planned to be transported by road.</p>
<p>MOR_050_004_050 623</p>	<p>Environment The Morecambe and Morgan applications have the potential to directly and indirectly impact on their surrounding environment. It is noted that an Environmental Impact Assessment Scoping Report was produced that identifies areas for onshore and offshore assessment for physical, human and ecological consideration, and which has been used to inform the preparation of a Preliminary Environmental Information Report (PEIR). Areas for consideration include marine archaeology, ecology and environment, air quality, flood risk, traffic and transport, noise(including underwater noise), visual impact and socio-economic impact, both during and post-construction. Given the proximity of the proposed developments to Westmorland and Furness and the potential level of interaction between the area and the project, these assessments should include full consideration of the impacts to maximise benefits and ensure appropriate mitigation within the Westmorland and Furness Council area as well as in other areas and within and in proximity to the proposed development sites (both onshore and offshore). In particular, impacts from the sites may have the potential for wider reaching direct and indirect impacts within Morecambe Bay which must be fully taken into consideration and mitigated.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment. The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects. These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement. Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts. Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Detailed mitigation will be determined post consent once the Project parameters are fully refined and understood. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p>
<p>MOR_050_005_050 623</p>	<p>Socio-economic Impact The potential socio-economic impacts of the proposals that have been scoped into the Preliminary Environmental Information Report (PEIR) are: • The impact on economic receptors including employment, GVA, and supply chain demand • The impact of increased employment opportunities • The impact on the demand for housing, accommodation and local services • The impact on tourism and recreation The socio-economic regional study areas have been linked to the selection of potential construction, operations and maintenance, and decommissioning ports that could support the proposal. The Council strongly supports the use of Barrow Port as it is ideally located and equipped to support the proposals. Barrow Port is already a significant offshore wind supply base, especially with operations and maintenance, which could be increased. Relevant local experience, expertise, skills, training and access to supply chains already exist, and these could be further developed to support the project, whilst delivering socio-</p>	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection will be made post consent. The Applicant has also submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11). Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>economic benefits for the area. Sustainability is key in ensuring positive, long term socio-economic impacts are delivered and the full benefits realised. Capacity would need to be carefully considered and planned, with any required investment in infrastructure identified and secured early. A key area of focus should be the approach to utilising local assets, resource, and facilities. The overarching approach should be to ensure positive socio-economic impacts are anchored locally to support long term improvements.</p>	
<p>MOR_050_006_050 623</p>	<p>A Partnership Approach to Delivery The Council are keen to work with the developers to ensure maximum local benefits are realised in the delivery of the project and anticipates a partnership approach that aims to fully mobilise local assets and expertise, in a way that delivers genuine local benefits for our communities. The Council anticipates that this will involve a planning performance agreement, which would ensure sufficient resource can be allocated to support the required engagement and delivery of the project through the development consent process. The Council would welcome early discussions to explore this and allow identification of the key areas of focus. The Council anticipates these to include skills, training, supply chain engagement, community benefit and the mechanisms for an inclusive approach that supports the levelling up agenda alongside its green growth and decarbonisation priorities. The Council are particularly keen to begin discussions about how development can help address specific local challenges associated with pockets of deprivation, potentially as part of a comprehensive community benefits package. The Council would also like to explore how the development might act as a catalyst to unlock wider energy related opportunities for Cumbria, as identified in the CLEPs Clean Energy Strategy and the Borderlands Inclusive Growth Deal.</p>	<p>The Applicant notes your response. The Applicant has held engagement with the Cumbria Local Enterprise Partnership (CLEP) on the 27 March 2024, and look forward to engaging with the CLEP in the future.</p> <p>A Skills and Employment Plan and planning for the Project's supply chain are being developed and further consultation upon these is expected as the Project design (and port(s) selection) progresses post-consent. An Outline Skills and Employment Plan (Document Reference 6.11) has been provided as part of the DCO Application. The Outline Skills and Employment Plan and Chapter 20 Socio-economics, Tourism and Recreation (Document Reference 5.1.20) considers vulnerable groups including those in pockets of deprivation. Further information is presented in Section 19.6 in Chapter 20 Socio-economics, Tourism and Recreation.</p>
<p>MOR_051_001_050 623</p>	<p>Good afternoon I'd like to register Isle of Man Airport's interest in your wind projects, on the grounds of flight safety. Please ensure that IOM Airport is on your consultation list. Many thanks</p>	<p>The Applicant is in engagement with Isle of Man Ronaldsway Airport (IoM Airport).</p> <p>A detailed technical safeguarding analysis of Instrument Flight Procedures (IFP) was undertaken, confirming there is no impact to the IoM Airport. Radar Line of Sight analysis predicts a potential cumulative impact with the other Round 4 projects (Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project) to the IoM Airport's Primary Surveillance Radar (PSR) system. Engagement with the IoM Airport remains ongoing on this matter.</p> <p>Further information on our assessments can be found in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_052_001_200623	Thank you for the opportunity to comment on the proposed development at subject. We note the contents and the issues that will be addressed and wish to clarify several matters that are covered in the report. Aviation Obstacle Notification. The CAA requires notification of a change to aviation obstacles if it or they are 100 metres or more above sea level, in accordance with Article 225A of the Air Navigation Order (2016)	Civil Aviation Authority requirements for aviation obstacle notification are included in the embedded mitigation summarised in Section 16.3.3 in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).
MOR_052_002_200623	Additional consideration of the aviation obstacle environment may be required during the initial build phase and the temporary use of cranes that may extend above a height of 100 metres or in the case of pre-built turbines being towed from shore to final generating position.	This has been considered and presented in Section 16.3.3 in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).
MOR_052_003_200623	Aeronautical Obstacle Lighting and Marking A Lighting Management Plan (LMP) must be agreed and implemented in consultation with the CAA in order for the UK to meet its international obligations under the Chicago Convention. The CAA uses requirements set out in Article 223 of the Air Navigation Order (2016) as the basis for its requirements.	Lighting requirements are summarised in Section 16.3.3 in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16) and would be agreed upon through consultation with the Civil Aviation Authority, Ministry of Defence, Maritime and Coastguard Agency (MCA) and Trinity House.
MOR_052_004_200623	Instrument Flight Procedures An Instrument Flight Procedure (IFP) is a set of instructions regarding navigation around aerodromes. Within the design of IFPs, rules are set out regarding obstacle clearance, to ensure the necessary safeguarding. The protected areas for IFPs are complex as it is necessary to consider where the obstacle is in relation to multiple stages of multiple flight paths for multiple types of aircraft. This may be relevant for windfarms built within 30 nautical miles (~55km) of an aerodrome or pre-built turbines being towed from shore to final generating position.	Potential effects on Instrument Flight Procedures are considered and presented in Sections 16.5.2.2 and 16.5.3.1 and assessed in Section 16.6.2.2 in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).
MOR_052_005_200623	Impacts on civil aviation monitoring systems. Wind turbines located within the line-of-sight of surveillance systems (in particular, primary radar) can cause clutter and interference and can result in performance degradation. Radar line-of-sight analysis is theoretical; operationally there are other factors such as signal refraction, diffraction, attenuation and anomalous propagation within a given radar environment that can influence the probability of an operational wind turbine being detected.	Potential impacts on Primary Surveillance Radars are considered in Sections 16.5.2.4, 16.5.2.5, 16.5.3.2 and 16.5.3.3 and assessed in Section 16.6.3.1 in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).
MOR_052_006_200623	The CAA ensures that air navigation service providers undertake appropriate safeguarding activities in respect of their systems and equipment used for the provision of services, that changes to the operating environment are fully considered within their Safety Management Systems and that the operational systems and equipment are functional and being used safely. We recommend that engagement with all potentially affected aviation stakeholders is undertaken and appropriate mitigation schemes developed.	The Applicant notes your response. Consultation with potentially affected stakeholders is summarised in table 16.1 in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_052_007_200 623	<p>Helicopter Operations</p> <p>This covers two aspects: (1) potential helicopter support for operations and maintenance of the wind farm itself; and (2) impact on offshore helicopter operations to existing platforms and installations</p>	<p>Helicopter requirements for the Project are set out in Table 16.2 in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).</p> <p>Offshore helicopter operations are discussed in Section 16.5.2.6 and assessed in Sections 16.6.2, 16.6.3 and 16.6.4.</p> <p>Appendix 17.1 (Document Reference 5.2.17.1) provides a detailed helicopter access study regarding oil and gas platforms.</p>
MOR_052_008_200 623	<p>Requirements for winching operations should be discussed with appropriate helicopter operators well in advance. Where such operations are undertaken, additional platform design criteria, lighting on the wind turbines, obstacle clearance and marking of the blades may be required. This is detailed in CAA Publication (CAP) 437 – Standards for Offshore Helicopter Landing areas.</p>	<p>Lighting and marking is detailed in Section 16.3.3.3 in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16). The Project would follow CAP 437 guidance as appropriate.</p>
MOR_052_009_200 623	<p>All offshore helicopters operate with limited icing clearances which means that they must be able to descend to warmer air near the sea surface at any point on the route. Operation through a wind farm corridor is highly unlikely and it might be that they would have to route around the wind farm. This may impact fuel burn and load capacity. In addition, where wind turbines are located in the vicinity of existing platforms and installations that offshore helicopters operate to/from, consideration must be given to approach and take off, including in abnormal situations (e.g. one engine inoperative). Engagement with operators and duty holders as appropriate should be undertaken.</p>	<p>Icing is only relevant in Instrument Meteorological Conditions (IMC). Day Visual Meteorological Conditions (VMC) helicopter operations can route through corridors, as is current practice.</p> <p>Amendments to the windfarm site boundary have been made since PEIR and the windfarm site no longer overlaps with the Calder (CA1) platform.</p> <p>The Helicopter Access Study (Document Reference 5.2.17.1) shows that future access to some oil and gas platforms would be impacted by the presence of wind turbine generators (WTGs). Whilst this would be a logistical impact on the operator, Search and Rescue (SAR) access would remain unaffected.</p> <p>The Applicant has established lines of communication with the relevant oil and gas platform operators on the terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness (as further discussed in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17)).</p>
MOR_053_001_220 623	<p>Morecambe Offshore Windfarm Generation Assets: Statutory Consultation under Section 42 of the Planning Act 2008 (19th April – 4th June)</p> <p>Thank you for consulting Cyfoeth Naturiol Cymru / Natural Resources Wales (NRW) on the Preliminary Environmental Information Report (PEIR) for the Morecambe Offshore Windfarm: Generation Assets, received on 19th April 2023.</p> <p>Please note that the comments provided herein are made without prejudice to any (further) advice NRW may need to give, or decisions NRW may need to take, in a project specific context should different circumstances or new information emerge that NRW will need to take</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>into account. The comments provided in the main body of this response include all those matters NRW Advisory (A) recommend will need to be addressed prior to formal submission. The key areas highlighted for relevant receptors are summarised as follows:</p>	
MOR_053_002_220 623	<p>Key Issues</p> <ul style="list-style-type: none"> • Marine Physical Processes: NRW (A) strongly advise that cable protection measures are minimised as far as possible to reduce the potential for significant cable/scour protection to alter the seabed sediment transport processes leading to permanent alterations to the seabed morphodynamics. 	<p>Following industry best-practice, the Applicant would seek to minimise the use of cable protection. A cumulative assessment of cable/scour protection on benthic receptors and other inter-related receptors is presented in Section 9.7 of Chapter 9 Benthic Ecology (Document Reference 5.1.9). The cumulative assessment includes consideration of Morgan and Mona and the Transmission Assets projects, as informed by their respective PEIRs</p>
MOR_053_003_220 623	<ul style="list-style-type: none"> • Fish and Shellfish Ecology: NRW (A) agree with the conclusions of the PEIR but advise that the potential for cumulative effects to Atlantic cod need to be considered further in the full Environmental Statement. 	<p>It is noted that NRW agree with the conclusions of the PEIR. Cumulative impacts on cod are considered in Section 10.7.3.2 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10).</p>
MOR_053_004_220 623	<ul style="list-style-type: none"> • Marine Mammals: NRW (A) are unable to agree with the conclusions to many of the assessments provided for Marine Mammals within the PEIR, either due to issues with the methodologies employed, the data that has been used, or lack of justification for the approach taken for assessments. NRW (A) have provided advice on further work considered necessary. 	<p>The Applicant notes your response. With assessments updated in consideration of advice received from NRW and the full 24 months survey data now available and presented in Chapter 11 Marine Mammals (Document Reference 5.1.11).</p>
MOR_053_005_220 623	<ul style="list-style-type: none"> • Marine ornithology: NRW (A) are unable to agree with conclusions of multiple assessments within the PEIR, due to provision of only 12 months' worth of survey data, methodologies employed, or lack of justification for the approach taken for assessments. NRW (A) provide advice on the further work considered necessary. 	<p>The Applicant notes your response. With assessments updated in consideration of advice received from NRW and the full 24 months survey data now available and presented in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_053_006_220 623	<ul style="list-style-type: none"> • Seascape, Landscape and Visual Impacts: NRW (A) agree with the conclusions on visual effects reached within the SLVIA and are satisfied with the decision to scope out designated landscapes in Wales from the landscape and seascape assessments. 	<p>The Applicant is in agreement with NRW with regard to the decision to scope out effects on designated landscapes in Wales and the conclusions on visual effects reached in the SLVIA (being not significant).</p>
MOR_053_007_220 623	<p>The advice provided herein relates to the potential impacts of the proposals on the Welsh marine area and Welsh protected sites. Accordingly, where advice relates to nature conservation interests within Welsh inshore waters, Reference may be made to Welsh Offshore waters and English waters (both inshore and offshore) in light of the relevance to mobile species and potential cross-border and cumulative / in-combination impacts.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Where potential impacts are wholly within Welsh offshore waters or English Onshore / Offshore waters, NRW (A) defer to comments provided by JNCC and Natural England respectively.</p> <p>Please do not hesitate to contact us if you require any further information or clarification on the above.</p>	
MOR_053_008_220 623	<p>1. Offshore Advice</p> <p>1.1 Physical Processes</p> <p>1.1.1 Detailed Comments</p> <p>1. Sand wave clearance at Morecambe Offshore Windfarm (OWF) Array site associated with site preparation of Wind Turbine Generator (WTG) foundations and cable laying installation will be conducted at discrete locations within the array site and is proposed to be much lower (428,700 m³) than that proposed for Morgan OWF Array site (24,053,910 m³) as per the Morgan PEIR, and Mona OWF Array site (21,020,341 m³) as per the Mona PEIR. NRW (A) consider that in isolation, sand wave clearance will only cause localised impacts to seabed morphology and bedload sediment transport at the western end of the project site and will not give rise to any far field cumulative effects even when considered in combination with the Morgan and Mona OWF as they are located 11.1 and 9 km respectively.</p>	<p>The Applicant notes your response. Revised sandwave clearance/levelling volumes for the Project are presented in Table 7.2 in Chapter 7 Marine Geology Oceanology and Physical Processes (Document Reference 5.1.7) (for clarity, seabed preparation for foundations and cables is 561,463m³ and cable installation is 540,000m³). There has been a reduction in the western extent of the windfarm site boundary from PEIR to ES, which has removed the area of sandwaves that were present in the southwest corner of the windfarm site assessed in the PEIR. Information on the site boundary change is provided within the Project September 2023 newsletter. Given the lack of sandwaves identified within the windfarm site, the volume presented in the ES is considered precautionary.</p>
MOR_053_009_220 623	<p>2. There is a significant amount of cable/scour protection proposed for Morecambe OWF Array (456,760 m²), which will remain in situ on decommissioning, as is the case proposed for Morgan and Mona OWFs. Taking into consideration potential cumulative and in-combination impacts, NRW (A) consider that there is a very significant amount of cable/scour protection potentially proposed for both the Morgan and Mona Array sites (based on worst case scenario gravity base foundations 1,304,368 m² and 2,176,423 m² respectively) which, both individually and when taken together with Morecambe will lead to long term habitat loss and change of seabed substrate and supporting habitat for other receptors (i.e. birds, benthic). Permanent presence of rock could potentially alter the seabed sediment transport processes leading to permanent alterations to the seabed morphodynamics. NRW (A) strongly advise that cable protection measures are minimised as much as possible.</p>	<p>Following industry best-practice, the Applicant would seek to minimise the use of cable protection. A cumulative assessment of cable/scour protection on benthic receptors and other inter-related receptors is presented in Section 9.7 of Chapter 9 Benthic Ecology (Document Reference 5.1.9). The cumulative assessment includes consideration of Morgan and Mona and the Transmission Assets, as informed by their PEIRs</p> <p>A Cable Specification and Installation Plan would be submitted to the MMO for approval and in consultation with the relevant stakeholders and secured through the Draft Deemed Marine Licence (see schedule 6 of the Draft DCO (Document Reference 3.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_010_220 623	<p>1.2 Benthic Subtidal and Intertidal Ecology</p> <p>1.2.1 Detailed Comments</p> <p>3. NRW (A) note the Zone of Influence (ZOI) does not extend into Welsh waters and therefore have no comments to make. Notwithstanding this, please refer to concerns raised by the NRW Physical Process Specialist regarding potential cumulative impacts from the presence of cable/scour protection, that could lead to indirect impacts on benthic habitats. 1.3 Fish and Shellfish Ecology</p>	The Applicant notes this comment, with responses provided to physical processes comments.
MOR_053_011_220 623	<p>1.3.1 Key issues</p> <p>4. Overall, NRW (A) agree with the conclusion of no significant impact to site integrity for diadromous fish features of the following sites: Dee Estuary/ Aber Dyfrwy SAC, River Dee and Bala Lake/ Afon Dyfrwy a Llyn Tegid SAC, Afon Gwyrfai a Llyn Cwellyn SAC and Afon Eden – Cors Goch Trawsfynydd SAC.</p>	The Applicant notes that NRW agree with the conclusions for the diadromous fish assessment for the SACs mentioned.
MOR_053_012_220 623	<p>1.3.2 Detailed Comments</p> <p>5. The following comments are with Reference to the assessment of marine fish found outside of Welsh waters and therefore are provided only for information.</p>	The Applicant notes your response.
MOR_053_013_220 623	6. With Reference to Chapter 10, Fish and Shellfish Ecology, Section 10.362, NRW (A) note the conclusion of the PEIR and that cumulative impacts to herring from underwater noise will be further assessed in the full ES	Herring spawning habitat heatmapping, using AFBI NINEL herring larvae survey data from the previous 10 years has been undertaken and is presented in Section 10.5.4 of Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10). The heatmap is overlaid with precautionary 135dB SELSS noise contours in Figure 10.6. This shows that there is no direct overlap in the worst-case temporary behavioural impact range derived from Hawkins et al., (2014) with either the historical or likely present day spawning ground at the Isle of Man. However, an assessment on herring spawning is made noting the proximity and limitations of the definition of spawning ground in Section 10.6.2.4 in Chapter 10 Fish and Shellfish Ecology.
MOR_053_014_220 623	7. Atlantic cod have high intensity spawning and nursery grounds overlapping with the array site and are a group 3 hearing fish which are sensitive to noise. It is unclear from the assessment whether cod have been assessed only as a fleeing receptor. NRW (A) note the consultation advice from PINS, and MMO that all receptors are modelled as stationary.	The Applicant took a precautionary approach and with the recommendation of the MMO, all fish have been treated as stationary receptors for the underwater noise impact assessment, including for sequential piling (Section 10.6.2.4 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10)) and for the cumulative noise assessment (Section 10.7.3 in Chapter 10 Fish and Shellfish Ecology).
MOR_053_015_220 623	8. Atlantic cod are listed as Vulnerable (VU) on the IUCN Red List and ICES advice for 2023 for the Eastern Irish sea stock (division VIIa) is that there should be zero catch (Working Group for the Celtic Seas Ecoregion (WGCSE). As there is potential for underwater noise to cause disturbance or sub-lethal injury to cod, in the same manner as for	In acknowledgement of the IUCN listing and ICES advice on cod take in the Irish Sea, the cumulative impacts on cod are considered in Section 10.7.2.2 in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10).

Unique Reference Identifier	Consultation response received	Applicant response
	herring, NRW (A) advise that best practice would be to consider the potential for cumulative effects to Atlantic cod in the full ES.	
MOR_053_016_220 623	<p>1.4 Marine Mammals</p> <p>1.4.1 Key Issues</p> <p>9. As the Morecambe generation assets project is located wholly in English waters, NRW (A)'s primary area of interest for this project is on impacts to Welsh designated sites. However, NRW (A) have also provided advice on the overall methodological approaches as these are relevant to the assessment of impacts to Welsh designated sites. The following key issues have been identified for Marine Mammals:</p>	The Applicant notes your response.
MOR_053_017_220 623	<ul style="list-style-type: none"> • NRW (A) do not consider that the inter-related effects for Marine Mammals have been adequately assessed. 	The Applicant notes your response. A full response has been provided against your detailed comment on this point below.
MOR_053_018_220 623	<ul style="list-style-type: none"> • No noise attenuation technologies appear to have been proposed / discussed as mitigation measures. 	The Applicant notes your response. A full response has been provided against your detailed comment on this point below.
MOR_053_019_220 623	<ul style="list-style-type: none"> • NRW (A) do not agree with some of the proposed marine mammal baseline densities / use of dual densities. 	The Applicant notes your response. A full response has been provided against your detailed comment on this point below.
MOR_053_020_220 623	<ul style="list-style-type: none"> • NRW (A) consider that the Documents provided contain some inaccuracies and assumptions made with regard to underwater noise disturbance thresholds. 	The Applicant notes your response. A full response has been provided against your detailed comment on this point below.
MOR_053_021_220 623	<ul style="list-style-type: none"> • NRW (A) disagree with the approach taken to assess underwater noise during other construction activities and geophysical and seismic surveys. 	The Applicant notes your response. A full response has been provided against your detailed comment on this point below.
MOR_053_022_220 623	<ul style="list-style-type: none"> • NRW (A) consider that Barrier effects (particularly for grey seal) have not been adequately assessed. 	The Applicant notes your response. A full response has been provided against your detailed comment on this point below.
MOR_053_023_220 623	NRW (A) disagree with the approach taken to assess cumulative effects.	The Applicant notes your response. A full response has been provided against your detailed comment on this point below.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_024_220 623	<p>1.4.2 Detailed Comments</p> <p>1.4.2.1 Chapter 11 Marine Mammals</p> <p>10. No evidence has been put forward in Chapter 11, Marine Mammals, that the three disturbance pathways scoped in for the project will not act additively (i.e. inter-related effects). NRW (A) advise that this is provided, or an assessment carried out.</p>	<p>Interactions are discussed in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.10, including interrelated effects as well as effects across the phases of the Project.</p>
MOR_053_025_220 623	<p>11. The use of noise mitigation strategies / attenuation technology such as bubble curtains, timing of piling, or piling methods, have not been proposed as potential mitigation methods in Table 11.4 – Additional measures. NRW (A) strongly recommend that these are considered and included in any future mitigation plan. Whilst mitigation might not be formally required for the purposes of removing Adverse Effect on Site Integrity (AEOSI) in the Habitats Regulations Assessment (HRA) or reducing significant effects in the Environmental Impact Assessment (EIA), it should be incorporated in accordance with industry best practice to reduce effects in relation to European Protected Species (EPS) protection.</p>	<p>Chapter 11 Marine Mammals, Table 11.34 presents an overview of potential mitigation measures and those considered in the ES but is not a definitive list of considerations listed in the Marine Mammal Mitigation Protocol (MMMP). The Draft MMMP has been submitted with the DCO application. The final MMMP and required mitigation measures will be confirmed with consultation post-consent when the Project detailed design is further refined. A Marine Wildlife Licence will also be applied for prior to construction to assess any potential for injury or disturbance to EPS during construction based on the final project design and requirements.</p>
MOR_053_026_220 623	<p>12. NRW (A) note Reference to Waggitt et al., (2019) in Section 11.5, Existing environment, which has been used to provide densities for some species. However, the authors stated that their paper should not be used for absolute densities in this way. Therefore, NRW (A) recommend using densities obtained from the newest version of the Marine Mammal Atlas (Evans and Waggitt, 2023), which are based on 30 years of sightings data. The report is now available on the NRW website at 646: Modelled Distributions and Abundance of Cetaceans and Seabirds of Wales and Surrounding Waters (cyfoethnaturiol.cymru).</p>	<p>All recent information and data sources have been considered for the Environmental Statement and have been presented in Section 5 of Appendix 11.2 (Document Reference 5.2.11.2). Evans and Waggitt (2023) has been reviewed and applied where appropriate. The new SCANS-IV survey published in Q4 2023 has been reviewed, and densities compared.</p> <p>There are limitations to all the sources, which is discussed in the Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.4.6, and as a precautionary approach, the density estimates for each marine mammal species are based on the highest for the area, using available data sources.</p>
MOR_053_027_220 623	<p>13. Alternatively, for species with low numbers of survey sightings, an approach similar to that proposed in other projects (e.g. the Mona and Morgan Offshore Wind Farms) could be taken i.e. the use of Scans II densities for common dolphin and adjacent Scans III block E density for Risso's and Minke whale.</p>	<p>All recent information and data sources have been considered for the Environmental Statement and have been presented in Section 5 of Appendix 11.2 (Document Reference 5.2.11.2). Evans and Waggitt (2023) has been reviewed and applied where appropriate. The new SCANS-IV survey published in Q4 2023 has been reviewed, and densities compared.</p> <p>There are limitations to all the sources, which is discussed in the Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.4.6, and as a precautionary approach, the density estimates for each marine mammal species are based on the highest for the area, using available data sources.</p>
MOR_053_028_220 623	<p>14. NRW (A) strongly advise against the use of dual densities – a detailed justification from an ecological perspective would be required to support their proposed use.</p>	<p>It would be an unrealistic worst-case if the site-specific summer density for harbour porpoise would be applied, for example to the dose-response-curve. The justification for this approach is based on a comparison of harbour porpoise densities from Morgan (0.247 animals/km²), Mona (0.097 animals/km²), Awel y Môr (0.395 animals/km²) and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>SCANS-IV block CS-E (0.5153 animals/km²), which give evidence that surrounding area has much lower densities and thus the application of dual densities is more representative of the wider area. The 5dB noise contour levels cover most of the Liverpool Bay area, thus incorporating other OWFs where lower densities have been measured. Thus, for the harbour porpoise dose response assessment, the site-specific summer density within the contours of the windfarm site and 10km buffer has been used, and for all noise contours beyond the 10km buffer the density estimate from the worst-case wider density are applied. Dual densities are not used in other assessments (such as Effective Disturbance Range calculations) or for other species where their use cannot be similarly justified.</p>
MOR_053_029_220 623	<p>15. With Reference to Section 11.6.3.2, Disturbance from Underwater noise, Paragraphs 11.270–1, NRW (A) disagree that there are currently no agreed thresholds or criteria for the behavioural response and disturbance of marine mammals, and recommend that the assessment for behavioural disturbance is carried out using appropriate behavioural thresholds and methods, including:</p> <ul style="list-style-type: none"> • JNCC Report No. 654, which lays out JNCC, Natural England and DAERA’s advice on the assessment of significant disturbance in UK Special Areas of Conservation (SACs) for harbour porpoise. • NRW PS017, which lays out NRW’s position on how to assess the effects of underwater noise on harbour porpoise behaviour (including from pile driving) • Tougaard (2021), which provides details on thresholds (or potential thresholds) for behavioural reactions to noise for marine mammals • Heinis et al (2019), which provides the background for the Dutch Framework for Assessing Ecological and Cumulative Effects (KEC) from pile driving on harbour porpoise SACs • National Marine Fisheries Service (NMFS) thresholds for Level B disturbance 	<p>Whereas TTS and PTS ranges developed by Southall et al. (2019b) have found national/ international acceptance, there are currently no widely accepted industry standards regarding thresholds or criteria for the behavioural response and disturbance of marine mammals. In the Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.2, JNCC Report No. 654 has been applied by using EDRs for harbour porpoise. Additional disturbance assessments were made using several methods: dose-response curve for harbour porpoise was applied to all cetacean receptors; application of known disturbance ranges for harbour porpoise (26km EDR), seals (25km), minke whale (30km), and TTS ranges for all dolphin species for comparison. Population modelling (iPCoD) was used for harbour porpoise, bottlenose dolphin, minke whale and both seal species applying the worst case level of disturbance for the different metrics listed alongside the potential PTS impacts.</p> <p>The Applicant acknowledges that there have been several other studies, however, there was lack of agreement on disturbance ranges. The NRW PS017 report refers to the JNCC report and Lucke et al. (2009). Heinis et al. 2019 reported that “there is as yet no international or national consensus in this respect (i.e prediction of behavioural responses)”. Regarding the Level B harassment threshold, NOAA makes no Reference to where this figure has been sourced. As per Southall et al. (2007), there is considerable variability in reactions to disturbance from cited authors and may not have been appropriately described or widely accepted outside the U.S.</p>
MOR_053_030_220 623	<p>16. Paragraph 11.271 states that for marine mammals a fleeing response can be assumed to occur at the same noise levels as Temporary Threshold Shift (TTS). However, fleeing responses can and do take place at lower levels as can be observed in existing dose / response curve data for various species (e.g. Graham et al., 2017, 2019; Neart na Gaoithe, 2018; Thompson et al., 2013; Whyte et al., 2020) and other studies on pile driving impacts (e.g. Brandt et al., 2018). NRW (A) draw attention to the fact that TTS thresholds are inherently under precautionary given that they mark the boundary between the highest level of disturbance and the start of physical impacts on the auditory system. NRW (A) therefore recommend that any disturbance estimates, and conclusions derived from the use of a</p>	<p>A variety of methods have been used to assess the potential effect of disturbance in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.2. TTS has only been applied as a proxy where there was no suitable alternative such as with species specific dose -it/response curve data or EDRs.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	TTS threshold are revised / re-assessed using appropriate behavioural disturbance thresholds.	
MOR_053_031_220 623	17. With Reference to Paragraphs 11.278–9 Disturbance / displacement of harbour porpoise based on EDRs for piling, please note that NRW did not endorse the JNCC (2020) guidance, in order to retain some flexibility in approaches to the management of noise where NRW is the consenting / licensing authority (although the guidance still applies to Welsh waters beyond 12 nm). Effective Deterrent Ranges (EDRs), as applied in (JNCC, 2020), are area-based thresholds defined by Tougaard et al., (2013) as reflecting the overall loss of habitat that would occur if all animals vacated an area within the EDR, being equivalent to the mean loss of habitat per animal. Whilst they can be used to determine the number of animals disturbed, dose/response curves (where available) allow for more realistic assumptions about animal response, where the probability of a response will gradually decrease with increasing distance from the noise source. NRW (A) therefore recommend using a dose/response curve for predicting numbers disturbed, where applicable to Welsh inshore waters.	Dose-response curves have been applied for harbour porpoise, grey and harbour seal in Chapter 11 Marine Mammals (Document Reference 5.1.11) Section 11.6.3.2. The application of the harbour porpoise dose-response curve to dolphin spp. (Chapter 11 Marine Mammals, Section 11.6.3.2) has also been undertaken as a precautionary approach to disturbance; the limitations of this approach have been stated in Section 6.1.5.1. As dolphins are in a different functional hearing group to harbour porpoise this approach was very likely to over-estimate the number of individuals likely to be potentially disturbed.
MOR_053_032_220 623	18. In Paragraph 11.285, the Waggitt et al., (2019) harbour porpoise densities (which are lower than the survey densities), have been used in place of the project-specific densities when applying the dose/response curve to determine number of harbour porpoise disturbed. A detailed justification from an ecological perspective is required to support the proposed use of dual densities. Alternatively, to avoid the complexities of using two densities in the assessment, NRW (A) have previously advised the use of densities taken from the newest version of the Marine Mammal Atlas (Evans & Waggitt, 2023), which are based on 30 years of sightings data.	It would be an unrealistic worst-case if the site-specific summer density were applied, for example to the dose-response curve, across the full spread of the modelled contour ranges. The justification for this approach was based on a comparison of harbour porpoise densities from Morgan (0.247 animals/km ²), Mona (0.097 animals/km ²), Awel y Môr (0.395 animals/km ²) and SCANS block CS-E (0.5153 animals/km ²) which gave evidence that the surrounding area had much lower densities and thus the application of dual densities was more representative of the wider area. The 5dB noise contour levels covered most of the Liverpool Bay area (see Figure 6.1 and 6.2) and even spread into the neighbouring SCANS block, thus incorporating the area covered by other OWFs where lower densities have been measured. Thus, the site-specific summer density within the contours of the windfarm site and 10km buffer have been used, and for all noise contours beyond 10km buffer the density estimate from the worst-case wider density has been applied to the dose-response curve assessment
MOR_053_033_220 623	19. In Paragraph 11.288, NRW (A) believe that the dose/response relationship for harbour seal from Whyte et al., (2020) has been applied incorrectly. In this instance, it is being proposed that the 180 dB SELss annulus is used as the threshold for disturbance, despite Table V of Whyte et al., (2020) presenting the respective % changes in density between 180 dB to 115 dB SELss at intervals of 5 dB. Significant changes were recorded down to the 145–150 dB SELss interval, which	The Applicant would like to clarify, the Whyte et al. (2020) dose-response curve threshold for disturbance has been applied at 5db increments from 120dB to 200 dB SEL in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.2. At 145dB SEL 36.37% of individual have been predicted to be disturbed. This percentage increased at every 5dB SEL increment, up to 180dB SEL, at which point 100% of individual were predicted as likely to be disturbed.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>means that the proposal here is highly under-precautionary. NRW (A) strongly recommend that the dose/response relationship is applied correctly, and the assessment and any related conclusions are revised / updated.</p>	<p>As per the evidence provided in Whyte et al. (2020), at SEL levels below 145dB SEL no significant change in mean density was predicted</p>
<p>MOR_053_034_220 623</p>	<p>20. In Section 11.6.3.3, TTS and disturbance from underwater noise during other construction activities, Paragraph 11.325 states that if the response to underwater noise from other construction activities is displacement from the area, and that animals will return once the activity is completed, then the potential for any significant disturbance effects on marine mammals is unlikely. The above has considered displacement as the only metric of disturbance and overlooks behavioural responses and costs to energy balances that do not involve moving away from an area, or physiological responses that typically have no visible, external indicator and are thus not readily detectable in free-ranging animals. Existing literature shows, for example, that tagged harbour porpoises responded to fast ferry passages and vessel noise by making deeper dives, increasing swimming effort, and ceasing echolocation and foraging for several minutes (Wisniewska et al., 2018). Although these individuals lived in highly trafficked coastal waters, they did not seem to have habituated to vessel noise (Wisniewska et al., 2018). Similar findings were made by, e.g. Pirotta et al., (2013, 2015), Dyndo et al., (2015), Oakley et al., (2017), Marley et al., (2017a, 2017b) and Rojano-Doñate et al., (2023).</p>	<p>The Applicant is in agreement with the concerns regarding behavioural responses that did not involve moving away, displacement from the area altogether would be and has been considered as the worst-case. Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.3 has been considered with other behavioural responses to underwater noise from construction activities.</p> <p>Whilst the assessment returned values well below the 1% temporary disturbance magnitude threshold, it seemed that the use of TTS and the application of a 4km disturbance range for each construction activity (or vessel) is highly precautionary enough. Although there may be the possibility of animals altering their behaviour (other than being displaced), it would only be short term. Fernandez-Betelu et al. (2024) found that in relation to decommissioning activities, harbour porpoise were only displaced up to 2km, in line with Benhemma-Le Gall et al. (2021). As such, using the 4km radius seem appropriate to also cover possible behavioural effects, other than that of complete displacement. Further, the research noted that harbour porpoise returned to the area immediately after the activities ceased (Fernandez-Betelu et al., 2024).</p>
<p>MOR_053_035_220 623</p>	<p>21. Tables 11.37, 11.38, 11.39 and 11.42, show the predicted impact ranges as a point source for a single day of disturbance and the numbers impacted (compared against the Mammal Unit population). Any conclusions on the magnitude of effect are therefore based on a point source over a single day. Similarly, geophysical and seismic surveys have been shown as point sources in the assessment. NRW (A) disagree with this approach as it does not take into account the area covered per day, or the numbers impacted over the construction period.</p>	<p>Geophysical and seismic survey assessments have been updated to moving (Chapter 11 Marine Mammals (Document Reference 5.1.11)), rather than point sources. It should be noted that this was a highly precautionary approach, as at some point in the day, marine mammals would recover from the disturbance and return to the area, rather than staying away for the whole day, which is what the moving source assessment assumes.</p>
<p>MOR_053_036_220 623</p>	<p>22. Paragraph 11.382 suggests using a disturbance impact range of 2 km for construction vessels although no evidence or explanation has been provided to justify this choice over the 4 km impact range mentioned in Paragraphs 11.345, 11.346 and 11.376. NRW (A) recommend using a 4 km impact range, based on observations from Benhemma-Le Gall et al., (2021).</p>	<p>Benhemma-Le Gall et al. (2021) indicated that at 4km distance to a vessel, harbour porpoise presence was nearly constant at a probability of p=0.4 at all vessel intensity levels, indicating that the vessel did not affect the animals. However, at 2km distance from the vessel, the probability of occurrence decreased (with vessel intensity) by ~34%, meaning that the animals were responding to the vessel disturbance and avoided the area.</p> <p>However, as a precautionary approach, 4km has been used in ES Chapter 11 Marine Mammals (Document Reference 5.1.11) (Section 11.6.3.4 and 11.6.4.4) for assessing disturbance from vessels.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_037_220 623	23. With Reference to Section 11.6.3.5 Barrier effects caused by underwater noise, Paragraphs 11.390, 11.399, 11.402-3, evidence needs to be provided to support the statement that the windfarm site is not located on any known migration routes of marine mammals. Given the presence of a haul-out site in the Dee estuary, the potential for barrier effects to impact grey seal movement towards the haul-out site needs to be considered and adequately assessed. Given the impact ranges quoted for Paragraph 11.402, evidence should be provided to support the statement that there would be no potential for barrier effects between the windfarm site and the coast (30 km) as a result of underwater noise. A sufficiently detailed and justified assessment for barrier effects should be carried out.	The Applicant notes your response. The evidence in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.5 has been reviewed, and the assessment adjusted where appropriate.
MOR_053_038_220 623	1.4.2.2 Section 11.7 Cumulative effects 24. The project-specific impact distances calculated for this project have been taken as 'standard' and applied to all other projects that may act in-combination. NRW (A) advise that for all projects that have been scoped in, the impact distances obtained from project-specific assessments should be used. There is a mismatch in the spatial scales of the assessment. Only the numbers impacted by projects within the screening area have been considered, and these have been presented as a percentage of the total Celtic and Irish Sea (CIS) Mammal Unit (MU) population. Thus, there is a risk that cumulative impacts could be downplayed as a result.	Project-specific impact ranges were used wherever possible and publicly available data (e.g PEIRs for Morgan, Mona, etc; ESs for White Cross and Awel y Mor) have been assessed but where such information was not available in the public domain, known distances from literature were applied. The CEA has been updated to include all projects within the CIS in Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.7 and Appendix 11.4 (Document Reference 5.2.11.4).
MOR_053_039_220 623	25. In Paragraph 11.701, it has been concluded that 5.09% is not significant due to it being "only 0.09% over the threshold" for a significant effect. The proposal suggested here is to disregard a threshold of significance set out at the start of the report and as such, NRW (A) strongly advise recognising / acknowledging that there has been a potentially significant impact.	The Applicant notes your response. Chapter 11 Marine Mammals (Document Reference 5.1.11) has been updated as appropriate.
MOR_053_040_220 623	26. The Cumulative Affects assessment and conclusions appear to have been based on simultaneous impact (i.e. activities occurring at the same time) rather than cumulative impact where multiple projects additively contribute to the total stressor load of a population over time. NRW (A) advise that this should be re-assessed, and we strongly recommend doing this by conducting population modelling (as has been carried out for the Mona and Morgan OWF Projects). For assessing cumulative effects from piling, NRW (A) recommend the methodology used in the Scottish Natural Heritage (SNH) Report 1081 (Carter et al., 2019) as an example.	Population modelling (iPCoD) has been undertaken for the Environment Statement in line with the SNH Report 1081 (Smith et al., 2019), and takes into account PTS and disturbance resulting from pile driving at multiple projects over time.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_041_220 623	<p>1.4.2.3 Appendix 11.1 Underwater Noise Assessment</p> <p>27. With Reference to Section 5.3.2, Estimation of underwater noise propagation, NRW (A) agrees that at ranges over several kilometres, impulsive noise gradually loses its impulsive characteristics (Hastie et al., 2019; Martin et al., 2020). The range at which this occurs is dependent on the metric used. However, the current consensus is that we do not yet have enough data about these changes in impulsive character to be able to apply them to impact assessments (Southall, 2021), although further work is ongoing (e.g. through the Offshore Renewables Joint Industry Programme’s (ORJIPs) Range Dependent nature of Impulsive Noise (RaDIN) project). Therefore, NRW (A) recommend that until further evidence is available, a precautionary assumption should be made that impulsive noise keeps its impulsive characteristics (i.e. short duration, rapid onset, high amplitude) as it propagates away from the source, thus avoiding any potentially premature conclusions.</p>	<p>Subacoustech agreed with NRW’s interpretation. The modelled impact ranges with impulsive characteristics have been included for all ranges and have been used as the worst case Appendix 11.1 (Document Reference 5.2.11.1), but should be viewed with an awareness that these may well have been over precautionary.</p>
MOR_053_042_220 623	<p>28. NRW seek clarification as to why the conclusion has been made that “This consideration may begin at 3.5 km.” Given that in their analysis, Hastie et al., (2019) found that some “characteristics changed markedly within ranges of ~10 km, and that the mean probability of exceeding criteria 1 and 2 was <0.5 at ranges >3.5 km. In contrast, the mean probability of exceeding criteria 3 remained >0.5 up to ~37.0 km, and the mean probability of exceeding criteria 4 remained <0.5 throughout the range.” Here criteria 1-4 refer to four metrics selected as measures of impulsivity where (1) rise time <25 ms; (2) quotient of peak pressure and pulse duration >5,000 Pa/s; (3) duration <1 s; (4) crest factor >15 dB.</p>	<p>NRW was correct that there are many ways to define an ‘impulsive’ noise and that research into this was ongoing. There was no definitive conclusion to this.</p> <p>Subacoustech’s understanding of impulsive wave characteristics that were most likely to lead to direct harm or injury were a high noise level with rapid rise time, more than a relatively arbitrary pulse duration such as 1s, or the crest factor. Therefore, the suggested 3.5 km was probably the most indicative of where this consideration could begin. As per line above, the modelled impact ranges with impulsive characteristics have been included for all ranges and have been used as the worst case Appendix 11.1 (Document Reference 5.2.11.1), but should be viewed with an awareness that these may well have been over precautionary.</p>
MOR_053_043_220 623	<p>1.4.2.4 Appendix 11.2 Marine Mammal Information and Survey Data</p> <p>29. With Reference to Section 1.1.2 Study area, Paragraph 1.9, NRW (A) agree that the boundary used to capture the range and connectivity of the grey seal population is sufficiently large and is also large (and pragmatic) enough for other cetacean species.</p>	<p>The Applicant notes your response.</p>
MOR_053_044_220 623	<p>30. Regarding the use of seal MU’s and their cumulative population estimates for grey seal, NRW (A) note that there is some disagreement about the appropriateness of their boundaries which only extend to UK waters, especially in SW Britain where photo-ID data and recent telemetry studies demonstrate movements of seals not only around the Irish Sea, but also encompassing Southwest England, Northwest France and Ireland (Vincent et al., 2017, Russell et al., 2019, Carter et al., 2020, Langley et al., 2020; Luck et al., 2020).</p>	<p>The Applicant acknowledges the provided evidence supporting the knowledge of wide ranges exhibited by grey seals. For the Environmental Statement the assessment therefore included the Reference populations from relevant MUs (including Republic of Ireland) that have been understood to be the most representative of this behaviour and supported by tagging data. As the assessment was not using the OSPAR region III as the baseline population in the CEA assessment, only projects within the associated MUs have been screened in and assessed.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_045_220 623	31. NRW (A) note that in Section 1.3 Site-specific surveys, Paragraph 1.35, only one year of baseline survey data has been presented so far, however, the applicant has acknowledged that densities may potentially change for the final environmental statement.	The Applicant notes your response. Two-year survey data has been analysed and taken forward to the ES baseline in Section 3 of Appendix 11.2 (Document Reference 5.2.11.2).
MOR_053_046_220 623	32. Similar to our comments in Paragraph 12 above, NRW (A) note in Section 1.3.2 Density estimates for harbour porpoise, Paragraph 1.49, Reference to Waggitt et al., (2019) for absolute densities of cetaceans other than harbour porpoise in the project area, although the authors stated that their paper should not be used for absolute densities in this way.	For harbour porpoise, the site-specific density data has been taken forward for the ES as outlined in Sections 3 and 5 of Appendix 11.2 (Document Reference 5.2.11.2). For all other cetacean species, the highest density from a range of sources was applied to the assessment. These included SCANS-IV, Evans and Waggitt (2023) and Waggitt et al. (2019). The latter two were also applied across the area of the SCANS block F (in which the Project is located), which has presented the worst-case for Risso's dolphin, common dolphin and white-beaked dolphin.
MOR_053_047_220 623	33. Regarding Section 1.4 Existing environment, Paragraph 1.56, as noted above, NRW (A) advise the use of Evans and Waggitt (2023) over Waggitt et al., (2019).	The use of the more recent data by Evans and Waggitt (2023) has been reviewed and applied where appropriate. The new SCANS-IV survey was published in Q4 2023 which has been reviewed, and densities compared. There were limitations to all the sources which have been discussed in Chapter 11 Marine Mammals 9Document Reference 5.1.11), Section 11.4.6 and as a precautionary approach, the density estimates for each marine mammal species were based on the highest for the area, based on available data sources.
MOR_053_048_220 623	34. In Paragraph 1.143 Grey seal population counts, NRW (A) query the origin of the 0.2515 correction factor used for grey seal.	The correction factor was taken from the latest SCOS (2021) report (p.114): "[...] using the mean estimated proportion of the population hauled out during the survey window, and thus available to count, from telemetry data: [...] 0.2515 for grey seals (SCOS-BP 21/02)".
MOR_053_049_220 623	35. NRW (A) disagree in Paragraph 1.164 Review of potential disturbance from underwater noise during piling, that there are currently no agreed thresholds or criteria for the behavioural response and disturbance of marine mammals. Please refer to the source material outlined in our comments in Paragraph 15 of the current Document.	The Applicant acknowledges that there have been several studies, however, there was lack of agreement on disturbance ranges. Whereas the JNCC report No. 654 (to which NRW PS017 makes Reference) was quite clear on the use of EDRs, the Tougaard (2021) report made no Reference to behavioural disturbance, only TTS & PTS. Heinis et al., 2019 reported that "there is as yet no international or national consensus in this respect (i.e prediction of behavioural responses)". Whereas TTS and PTS ranges developed by Southall et al. (2019b) have found national/ international acceptance, there are currently no widely accepted industry standards regarding thresholds or criteria for the behavioural response and disturbance of marine mammals. In the Chapter 11 Marine Mammals (Document Reference 5.1.11), Section 11.6.3.2, JNCC Report No. 654 has been applied by using EDRs for harbour porpoise. Additional disturbance assessments were made using several methods: dose-response curve for harbour porpoise was applied to all cetacean receptors; application of known disturbance ranges for harbour porpoise (26km EDR), seals (25km), minke whale (30km), and TTS ranges for all dolphin species for comparison. Population modelling (iPCoD) was used for harbour porpoise, bottlenose dolphin, minke whale and both seal species applying the worst case level of disturbance for the different metrics listed alongside the potential PTS impacts.

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The Applicant acknowledges that there have been several other studies, however, there was lack of agreement on disturbance ranges. The NRW PS017 report refers to the JNCC report and Lucke et al. (2009). Heinis et al. 2019 reported that “there is as yet no international or national consensus in this respect (i.e prediction of behavioural responses)”. Regarding the Level B harassment threshold, NOAA makes no Reference to where this figure has been sourced. As per Southall et al. (2007), there is considerable variability in reactions to disturbance from cited authors and may not have been appropriately described or widely accepted outside the U.S.</p>
MOR_053_050_220 623	<p>1.4.2.5 Appendix 11.4 Marine Mammal Cumulative Effects Assessment Screening</p> <p>36. With Reference to Section 1.2.5 Screening area considered in the CEA, Paragraph 1.19, please refer to our comments in Paragraph 30 of the current Document regarding the appropriateness of the boundaries relevant to Seal Management Units.</p>	<p>The Applicant acknowledges the provided evidence supporting the knowledge of wide ranges exhibited by grey seals. For the Environmental Statement, the assessment therefore included the Reference populations from relevant Management Units (MUs) (including Republic of Ireland) that were understood to be the most representative of this behaviour. The OSPAR region III was not being used as the baseline population in the CEA assessment, and as such only projects within the associated MUs have been screened in and assessed.</p>
MOR_053_051_220 623	<p>37. With Reference to Section 1.3.1 Underwater noise from operational offshore wind turbines, Paragraphs 1.24–5, NRW (A) disagree with the conclusion to screen out operational noise both for the project alone as well as cumulatively. Stöber and Thomsen (2021) found indications that behavioural impact areas from larger size wind turbines could overlap and the whole wind farm might thus be considered an impact area, despite the relatively small impact radius for a single turbine. They concluded that for larger size wind turbines (i.e. of relevance to the Mona, Morgan and Morecambe OWF projects), operational noise needs to be considered in sufficient detail as a part of the EIA. Given the presence of multiple windfarms in close proximity, NRW (A) consider the decision to screen out this pathway from the cumulative assessment in particular, as under-precautionary.</p>	<p>An assessment for Project-alone and cumulative impacts of operational wind turbines has been included in Chapter 11 Marine Mammals (Document Reference 5.1.11) based on a review of OWFs in the CIS MU, for those projects that have become operational after the start of the baseline surveys in March 2021 and prior to construction at the Project.</p> <p>Based on a literature review and underwater noise modelling, the impact from operational turbines was expected to be very low; the ranges were modelled below <100m TTS and PTS and would therefore not overlap with a neighbouring turbine noise contours.</p>
MOR_053_052_220 623	<p>1.4.2.6 Draft Report to Inform the Appropriate Assessment</p> <p>38. In Table 5.1 Summary of European sites and features screened in, NRW (A) advise that Cardigan Bay SAC is designated for both Bottlenose dolphin and Grey seal. Furthermore, Pembrokeshire Marine SAC designated for Grey seal has not been screened in for assessment in this table. NRW (A) recommend that Pembrokeshire Marine SAC is included in line with NRW’s position statement on the use of marine mammal management units (MMUs) in HRA (NRW, 2022).</p>	<p>Both Cardigan Bay and Pembrokeshire Marine SACs are designated for grey seal, which have been screened in and assessed in the Report to Inform the Appropriate Assessment (RIAA) (Document Reference 4.9).</p>
MOR_053_053_220 623	<p>39. Regarding the Reference to population extent for Grey seal in Section 9.7 Grey Seal, Paragraph 1.1105, Reference should be made to the OSPAR Region III interim MU and the relevant NRW position statement (NRW, 2022).</p>	<p>The Applicant acknowledges the provided evidence supporting the knowledge of wide ranges exhibited by grey seals. For the Environmental Statement, the assessment therefore included the relevant MUs (including Republic of Ireland) that were understood to be the most representative of this behaviour and supported by tagging data.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		The ES assessment did not use the OSPAR region III as the baseline population in the Cumulative Effect Assessment (CEA), only projects within the associated MUs have been screened in and assessed. This approach has been carried forward in the Report to Inform the Appropriate Assessment (RIAA) (Document Reference 4.9).
MOR_053_054_220 623	40. In Table 9.4 Realistic worst-case scenarios for marine mammal assessments, it is stated in the row 'Underwater noise from other construction activities' that jetting is the worst-case cable installation method. However, this noise source has not been included in the underwater noise modelling.	As per Chapter 5 Project Description (Document Reference 5.1.5) of the ES, "cable burial can be achieved using [...] trenching (including jetting and mechanical cutting)". Jetting has not been modelled separately but it would be covered under 'trenching' in the underwater noise modelling.
MOR_053_055_220 623	41. In Section 9.4.2.1 Underwater noise and disturbance from other sources, Paragraph 1.675, as stated in Paragraph 22 of the current Document, NRW (A) advise a more precautionary 4 km vessel disturbance range assessment is conducted around the vessel rather than the stated 2 km, as per Benhemma-le Gall et al., (2021).	Benhemma-Le Gall et al. (2021) indicated that at 4km distance to a vessel, harbour porpoise presence was nearly constant at a probability of 40% at all vessel intensity levels, indicating that the vessel did not affect the animals. However, at 2km distance from the vessel, the probability of occurrence decreased (with vessel intensity) by ~34%, inferring that the animals were responding to the vessel disturbance and avoided the area. Therefore, as a precautionary approach, 4km has been used in assessing disturbance from vessels.
MOR_053_056_220 623	42. In Section 9.4.2 Project Alone Assessment, Paragraph 1.658, please refer to our comments in Paragraph 11 of the current Document regarding the use of noise mitigation strategies / attenuation technology such as bubble curtains, timing of piling (given North Anglesey Marine is a summer site) and piling methods as potential mitigation methods.	Embedded mitigation measures have been described which include piling schedules and soft-start and ramp up procedures. Mitigation has been further discussed in the Draft Marine Mammal Mitigation Protocol (MMMP) (Document Reference 6.5) submitted with the DCO Application.
MOR_053_057_220 623	43. With Reference to Section 9.4.2.2 Barrier effects caused by underwater noise, Paragraph 1.695, as noted in Paragraph 23 of the current Document, NRW (A) recommend that further evidence is provided to support the statement that "the windfarm site is not located on any known migration routes of marine mammals". Given the presence of a haul-out site in the Dee estuary, NRW (A) advise that the potential for barrier effects to impact grey seal movement towards the haul-out site needs to be considered and adequately assessed.	Barrier effects have been assessed both for Project-alone and in-combination. The potential for barrier effects from underwater noise for the Project-alone during operation and maintenance has been assessed in ES Chapter 11 Marine Mammals (Document Reference 5.1.11) (Section 11.6.4.4 and Section 11.6.4.5). The evidence in Chapter 11 Marine Mammals (Section 11.6.3.5) regarding migration routes and barrier effects has been reviewed, and the assessment adjusted where appropriate. The potential for effects to haul out sites has been assessed in Section 9.6.2.6.
MOR_053_058_220 623	44. Regarding Section 9.4 Harbour porpoise, Paragraphs 1.609–10, as noted above, NRW (A) advise the use of Evans and Waggitt (2023) over Waggitt et al., (2019).1.5 Offshore Ornithology	Both data sources (Evans and Waggitt (2023) and Waggitt et al. (2019)) have been considered in our assessments, with the survey site specific data presenting the worst case.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_059_220 623	<p>1.5.1 Key Issues</p> <p>45. NRW (A) notes that only 12 months of Digital Aerial Survey data are available to inform Baseline Characterisation of the project area, although a further 12 months have been collected, they are not presented and analysed for review in the PEIR and associated Documents. Therefore, NRW (A) cannot make any conclusive judgements based on this PEIR and accordingly, our advice focuses on the methodologies employed. NRW (A) highlights the risk that the additional data analysis could have the potential to change the conclusions of the Environmental Statement (ES) from those set out in the PEIR, and raise new issues not flagged by the PEIR assessments.</p>	<p>The ES includes the full 24 months of digital aerial survey data. Project-alone and cumulative impact assessments have been updated accordingly since PEIR in Sections 12.6 and 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_053_060_220 623	<p>46. As the Morecambe generation assets project is located wholly in English waters, NRW (A)'s primary area of interest for offshore ornithology for this project is on impacts to Welsh designated sites. However, NRW (A) have also provided advice on the overall methodological approaches taken for offshore ornithology as these are relevant to the assessment of impacts to Welsh designated sites. These include:</p> <ul style="list-style-type: none"> • The approach used for the calculation of breeding season Reference populations. • The approach used for assessment of displacement impacts for the construction phase. • The need for consideration of migrant seabird species (e.g. skuas, terns) in collision risk assessment. • Projects and data included in cumulative and hence, in-combination assessments. • The requirement for inclusion of further information on species identification confidence levels and rates. • The use of non-standard approaches to LSE screening for seabirds in the non-breeding season and for migratory non-seabirds and the need for further discussion on the merits of these approaches. • The approach to the assessment of Liverpool Bay SPA red-throated diver displacement and habitat loss. • The methods used for apportionment of impacts to designated sites in the non-breeding season(s). • Lack of assessment of SSSIs and features where there is potential for connectivity. <p>Further information on each of these issues is set out in our detailed comments below.</p>	<p>The Applicant notes your response. A Full response has been provided to each of your detailed points raised below.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_061_220 623	<p>1.5.2 Detailed Comments</p> <p>1.5.2.1 Chapter 12: Offshore Ornithology: General Comments</p> <p>47. As outlined as a key issue above and with Reference to Section 12.4.2, Data and information sources and to Appendix 12.2 Aerial Surveys Annual Report March 2021 to February 2022, the PEIR has been based on only 12 months of site-specific survey data. Consequently, NRW (A) are unable to make any comments/conclusions regarding the levels of impact, as numbers will change once the full 24 months of data are analysed and included. Hence NRW (A) advice focuses on the methodology used in the assessments and is based on the evidence currently available, and NRW (A) reserve the right to amend the advice in light of new evidence.</p>	The Applicant notes your response.
MOR_053_062_220 623	<p>48. Once the full 24 months of data have been included, the project alone and in-combination assessments should be revisited to account for the complete baseline survey data and any updates to cumulative and in-combination totals. NRW (A) advise that where predicted impacts equate to >1% of baseline mortality of the relevant population, further consideration is required through Population Viability Analysis (PVA) modelling.</p>	<p>The Project-alone and cumulative / in-combination assessments in the Environmental Statement (Section 12.7 of Chapter 12 Offshore Ornithology (Document Reference 5.1.12)) and the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) have been updated with the full 24 months of baseline survey data. PVA has been undertaken for great black-backed gull (Chapter 12 Offshore Ornithology, Section 12.7.3.1) where predicted cumulative impacts equate to >1% of the baseline mortality of the population. This approach was agreed through the Expert Topic Group (ETG).</p>
MOR_053_063_220 623	<p>49. NRW (A) advise that in addition to the assessment of SPAs/Ramsar sites within HRA related reports, Sites of Special Scientific Interest (SSSI's) and features need to be assessed within the ES. This includes where there is potential connectivity (e.g. within foraging range) and a potential impact pathway of seabird features of SSSI's that are not already assessed in the HRA reports as they are also features of SPA's/Ramsar sites. For example, the Pen y Gogarth / Great Orme's Head SSSI is designated for breeding kittiwake, guillemot and razorbill and the Morecambe generation assets project is located within foraging range of all three of these species. Hence quantitative assessments of displacement for guillemot and razorbill and collision for kittiwake should be undertaken for this site.</p>	<p>Effects on SSSIs have been considered in Chapter 12 Offshore Ornithology (Document Reference 5.1.12), Section 12.6.5 in addition to SPAs/Ramsar sites in the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9).</p>
MOR_053_064_220 623	<p>1.5.2.2 Breeding Season Reference Populations</p> <p>50. With Reference to Section 12.111, and throughout the Document, the breeding season populations for EIA are calculated by adding the breeding populations within mean-max foraging range + 1SD to the immature birds from the preceding Biologically Defined Minimum Population Scales (BDMPS) population, on the assumption that those birds will remain in the area. NRW (A) are uncertain of the appropriateness of this approach and suggest that approaches to calculating regional breeding Reference populations should be explored</p>	<p>Following discussions on this matter during the Expert Topic Group (ETG) in October 2023, Natural England provided written advice ('Advice regarding EIA scale Reference populations for assessments'). The preferred approach advised by Natural England uses the largest regional (BDMPS) breeding season population, calculated from data presented in Appendix A of Furness (2015). This approach has been adopted for the Environmental Statement (Sections 12.6 and 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12)). NRW has confirmed that it welcomes this updated approach (14th March 2024).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	collaboratively through the relevant project Expert Working Group (EWG).	
MOR_053_065_220 623	<p>1.5.2.3 Construction Disturbance, displacement and barrier effects (Section 12.6.2.1)</p> <p>51. With Reference to Table 12.19, Construction disturbance and displacement screening: NRW (A) do not agree that Gannet and Manx shearwater should have been screened out of assessment of construction displacement. There are empirical studies demonstrating that gannet are sensitive to displacement and barrier effects (Krijgsveld et al., 2011, Vanermen et al., 2013) and the SNCB (2017) interim displacement advice note considers Gannet to be a priority species for displacement assessment. With regard to Manx shearwater, NRW (A) note that the relative species abundance in the study area is high and there is low confidence in the low sensitivity to offshore wind farm disturbance and displacement estimate. NRW (A) also notes that Manx shearwaters have been shown to avoid the windfarm at North Hoyle in Liverpool Bay (see Table 3 of Dierschke et al., 2016). Therefore, NRW (A) advise that gannet and Manx shearwater should be fully considered within the construction disturbance and displacement assessment, as they have been for the operational phase assessment (this applies for HRA assessments as well).</p>	<p>Gannet is considered to have a low sensitivity to construction disturbance and displacement. The species shows a low level of sensitivity to ship and helicopter traffic (Garthe and Hüppop, 2004, Furness and Wade, 2012, Furness et al., 2013), but appears to be more sensitive to displacement from structures such as offshore wind turbines (Wade et al., 2016). Furthermore, this species has high habitat flexibility (Furness and Wade 2012) indicating that displaced birds could be predicted to readily find alternative habitats including foraging areas. Given the above and taking into account the limited duration of construction activities, it was therefore considered reasonable to screen gannet out in respect of this impact pathway. It should be noted that an assessment of operational gannet displacement has been presented in the ES, which concluded a negligible impact (<0.01% increase in annual mortality); any construction impact would therefore be significantly below this level.</p> <p>Manx shearwater is also generally considered to have a low susceptibility to construction disturbance and displacement based on previous studies e.g. Bradbury et al. (2014). Dierschke et al. (2016) suggested that Manx shearwater were avoiding North Hoyle Windfarm, stating that an obvious distribution gap was observed at the OWF, although evidence for this appeared limited. Dierschke et al. (2016) also noted that Manx shearwater have been recorded within Robin Rigg OWF. However, on a precautionary basis, Manx shearwater have been included in the assessment of construction displacement in the ES Chapter 12 Offshore Ornithology (Document Reference 5.1.12) (Section 12.6.2.1).</p>
MOR_053_066_220 623	<p>52. The construction displacement assessments for the species assessed in Section 12.6.2.1 (guillemot, razorbill and red-throated diver) have been undertaken on three 2 km radius circles around construction vessels. NRW (A) note that the construction phase presents a range of potential drivers that may cause displacement of seabirds. This includes vessel movement and construction activities (which may be both spatially and temporally limited), however the physical presence of the constructed turbines is also likely to cause a displacement response. As the construction phase progresses, more turbines are built and the spatial scale increases, until a point when the entire array is constructed, yet not operational, and may present the same displacement stimulus as an operational farm. Therefore, it should not be asserted that displacement will only occur where vessels and construction activities are present; instead NRW (A) consider that displacement is likely to occur within and around the constructed array area (due to the presence of turbines) and where construction activities are ongoing. This will represent an increasing spatial impact as construction progresses. NRW (A) advises that (in line with other projects) construction phase displacement impacts are simply assumed to be equivalent to 50% of operational and maintenance phase impacts</p>	<p>The applicant notes your response. The approach to construction phase Disturbance, Displacement and Barrier Effects has been updated in accordance with advice from NRW and Natural England. For the Environmental Statement (refer to Chapter 12 Offshore Ornithology (Document Reference 5.1.12), Section 12.6.2.1) (and Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) in respect of the red-throated diver and common scoter features of Liverpool Bay SPA), construction phase displacement impacts have been assumed to be 50% of operational and maintenance phase impacts.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	to account for the incremental development of the array. This advice also applies for HRA assessments.	
MOR_053_067_220 623	53. There has been no consideration given to construction vessel routes. NRW (A) advise that some indication should be given as to the port where construction vessels are likely to sail from and note that routes through the Liverpool Bay SPA should follow best practice protocols (including adhering to existing routes wherever possible) to minimise disturbance to red-throated diver and common scoter. This is also relevant for HRA assessments, particularly for Liverpool Bay SPA.	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection will be made post consent.</p> <p>It has been also assumed within the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) that, in a worst-case scenario, construction vessel movements would cross Liverpool Bay SPA. Embedded mitigation includes restricting vessel movements where possible to existing navigation routes, and best practice vessel management; refer to Section 12.3.3 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>
MOR_053_068_220 623	<p>1.5.2.4 Operation and Maintenance: Disturbance, displacement and barrier effects (Section 12.6.3.1)</p> <p>54. With Reference to Section 12.159, NRW (A) advise that once the full 24 months of data are included in the submission, the displacement assessments should use the mean seasonal peak population estimates based on the full 24 months of data. For example, for a species with a breeding season from April to July, this requires the average of the peak count between April and July in year one, and the peak count between April and July in a second year. This may require the counts to originate from different months in the two years (e.g. May in the first year and June in the second year). This allows for year-to-year variation in the precise time (and magnitude) of peak abundance estimates to be taken into account in arriving at a mean peak population estimate.</p>	<p>The Applicant notes and agrees with advised approach. The displacement assessment in the Chapter 12 Offshore Ornithology (Document Reference 5.1.12) (Section 12.6.2.1) and Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) utilised mean seasonal peak population estimates based on the full 24 months of data.</p>
MOR_053_069_220 623	55. As with construction displacement, no consideration of operation and maintenance vessel routes has been given. Again, some indication should be given as to the port where operation and maintenance vessels are likely to sail from and NRW (A) advise that routes through the Liverpool Bay SPA should follow best practice protocols to minimise disturbance to red-throated diver and common scoter. This is also relevant for HRA	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection will be made post consent.</p> <p>It has been assumed in the Environmental Statement and Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) that, in a worst-case scenario, operation and maintenance vessel movements would cross Liverpool Bay SPA. Embedded mitigation includes restricting vessel movements where possible to existing navigation routes, and best practice vessel management; refer to Section 12.3.3 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_070_220 623	<p>1.5.2.5 Collision Risk (Section 12.6.3.2)</p> <p>56. NRW (A) welcomes that the assessment of collision risk has been made for key sensitive seabird species and also for non-seabird migrant species that may have been missed by digital aerial surveys. However, NRW (A) advise that seabird species that may pass through the Morecambe generation assets site on migration (e.g. skuas, terns etc) should not be excluded from assessments based on low numbers recorded during site-based surveys alone. It would not be appropriate to use Strategic Ornithological Support Services Migrant Assessment Tool (SOSSMAT) for these species as they often migrate following coastlines at a distance offshore, rather than straight lines between point of origin and destination, which is an assumption of SOSSMAT/Migropath. Alternative approaches are required, such as estimating the abundance of a species of bird migrating through a wind farm footprint area based on an apportionment of migrant bird numbers across a broad migratory front. This approach is broadly consistent with that taken in the report for the Marine Scotland project on strategic assessment of collision risk of OWFs to migrating birds (WWT Consulting Ltd. 2014): http://www.gov.scot/Resource/0046/00461026.pdf. As an example, for a species that might pass through the Irish Sea as part of a longer migratory route (such as great skua), the risks that the population is exposed to relates to the proportion of the broad migratory front that passes across the proposed wind farm area. For a species that migrates exclusively over the sea, the broad migratory front could be defined as the width of the Irish Sea. Consideration should also be given to the distribution of birds within the broad migratory front: birds could be distributed evenly, or they might have a skewed distribution – e.g. if the species tends to avoid the coast on migration through the Irish Sea, then distribution could be biased towards the centre of the Irish Sea.</p>	<p>An assessment of collision risk for migratory seabird species has been undertaken and has been set out in Section 12.6.3.2 of Chapter 12 Offshore Ornithology (Document Reference 5.1.12). As suggested by NRW, this used an approach adapted from the Scottish Government Document Strategic assessment of collision risk of Scottish offshore wind farms to migrating birds (WWT Consulting and MacArthur Green, 2014).</p>
MOR_053_071_220 623	<p>57. With Reference to Seabird Collision Risk Modelling (CRM), NRW (A) welcomes that the preliminary collision risk modelling has been undertaken using the Stochastic Collision Risk Model (sCRM) developed by Marine Scotland (McGregor et al., 2018) and agree that the impact assessments have been based on Option 2 outputs. Although the wind farm parameters and bird parameters (biometrics, avoidance rates and nocturnal activity) are presented in Tables 12.2 and 12.41 respectively, NRW (A) recommend that the log files (input and output) produced by the sCRM tool are provided.</p>	<p>Full details of input and outputs for the Stochastic Collision Risk Model (sCRM) are provided in Appendix 12.1 (Document Reference 5.2.12.1). Input and output log files in digital format (as generated by the sCRM tool) are available on request.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_072_220 623	58. With regards to Migrant CRM, Table 12.46, the proportions of waterbird species at collision height (%Potential Collision Height (PCH)) for each species used in the CRM appear to be the central %PCH values for the relevant species groups from Table 3 of Wright et al., (2012). NRW (A) suggest that consideration should also be given to the ranges of %PCHs in Wright et al., (2012) to account for uncertainty. Clarification is required as to the source/justification of the 1% PCH listed for curlew, as Wright et al., (2012) indicates 25% PCH (range 5-75%) for waders. NRW (A) also advise that an example species Band (2012) input and output sheet are included. The CRM predictions for these species should also be apportioned out to the relevant SPAs in the HRA assessments.	The Applicant notes your response. The approach to assessing collision risk for migratory species has been updated for the DCO submission, including a range of Potential Collision Height (PCH) values. The PCH value for curlew in the PEIR was a transcription error; all values have been checked and updated as appropriate and have been set out in Section 12.6.3.2 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).
MOR_053_073_220 623	1.5.2.6 Cumulative effects (Section 12.7) 59. NRW (A) do not consider it appropriate to base the cumulative, and hence also in-combination, assessments on so many unknowns for impacts from many of the relevant other projects. Whilst these historic projects may not have undertaken quantitative assessments, or assessments using current approaches, estimates will need to be generated for these unknown projects in order to undertake meaningful assessments. NRW (A) suggest this should be explored collaboratively through the relevant EWG. These discussions could also cover potential issues over different avoidance rates, collision model options etc. used by other projects where there are data available. As a result, NRW (A) have not made any comments on the overall level of cumulative (or in-combination) impacts or their significance.	The Applicant notes your response. The approach to cumulative assessment presented in the Environmental Statement has been reviewed and agreed between the Morecambe, Mona and Morgan offshore wind projects (Sections 12.4.4 and 12.7 (Document Reference 5.1.12)). The adopted approach was set out in a separate note that has been submitted to Natural England and NRW (via the Morecambe/Mona/Morgan projects) and was considered appropriate to assess cumulative impacts on seabirds. The cumulative assessment has been updated to reflect the most up to date information from other projects, and a qualitative assessment undertaken to account projects with unknown values for collision and displacement.
MOR_053_074_220 623	60. Clarification is required as to the source of the Erebus figures that have been included in the cumulative assessments. NRW (A) note that if the figures included are from the original Erebus ES, then these will be incorrect, especially for auks as these numbers do not take account of apportionment of unidentified birds. NRW (A) advise that the figures in the Erebus Supplementary Environmental Information (SEI) report are used for auk displacement (Tables 5-1 to 5-3: Calculation of updated mean seasonal peaks) and for gannet, kittiwake and large gull collision (Table 5-36: Updated summary of collision risk mortalities): 'ORML2170 Project Erebus Supplementary Environmental Information Addendum' (which is available through the public register https://publicregister.naturalresources.wales/). The appropriate figures for use for Manx shearwater and gannet displacement can be found in the original Erebus ES submission 'Offshore Ornithology 11.4 Technical Appendix – Displacement Analysis'.	The Applicant notes your response. Cumulative values for Erebus have been updated within Section 12.7 in Chapter 12 Offshore Ornithology (Document Reference 5.1.12) using information from the 'Project Erebus Supplementary Environmental Information Addendum'.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_075_220 623	<p>1.5.2.7 Appendix 12.1: Offshore Ornithology Technical Report</p> <p>61. With Reference to Section 1.4.3, Collision Risk Modelling, whilst the input parameters (bird parameters and turbine parameters) are provided in Tables 1.1-1.3, NRW (A) recommend that the log files (input and output) produced by the sCRM tool be provided as an appendix. If the bird density data has been entered into the sCRM using the 1,000 samples from a distribution of mean densities (e.g. from a bootstrapped sample) option, then the bootstrapped data should be provided to enable the modelling to be re-run and the outputs checked. Please also see our comments in Paragraph 57 of the current Document with Reference to CRM in Chapter 12, Offshore Ornithology.</p>	<p>Full details of input and outputs for the Stochastic Collision Risk Model (sCRM) are provided in Appendix 12.1 (Document Reference 5.2.12.1). Input and output log files in digital format (as generated by the sCRM tool) are available on request.</p>
MOR_053_076_220 623	<p>1.5.2.8 Appendix 12.2: Aerial Surveys Annual Report March 2021 to February 2022</p> <p>62. Within Section 3.2, Survey results, Paragraph 66 and Table 3, NRW (A) notes that species identifications are given confidence levels of 'Possible', 'Probable' or 'Definite' and that all records of these species confidence levels are treated as positively identified to generate an 'ID rate'. Following this, a generic ID rate is presented incorporating all species for each survey, which is not useful. Therefore, NRW (A) suggest that more information is required to describe the data more fully</p> <ul style="list-style-type: none"> • Section 8.4.2 Migratory birds other than seabirds, Paragraph 216: A 100 km buffer has been used to screen SPAs/Ramsar's for migratory non-seabirds. NRW (A) advise that this is not a standard approach. NRW (A) recognise the need to identify a proportionate set of SPAs for a more detailed assessment and hence recommend that the merits of this approach be discussed further through the EWG. • Appendix 2 screening outcome for UK SPA and Ramsar Sites with ornithology qualifying features: Ynys Seiriol / Puffin Island SPA, Great cormorant: NRW (A) query the conclusion of significance of effect for this site and feature to be no LSE (screened out). This is because the justification column states, "Project beyond the published foraging range (mean max +1SD), therefore no connectivity during the breeding season. Screened in for non-breeding season effects as species was recorded during baseline surveys, and >1% of birds within the BDMPS region during this period will originate from this population." NRW (A) advise that the screening of this site and feature is checked. through presentation of the proportions of data assigned to all identification confidence categories for each species for each survey. 	<p>Annex VII of Appendix 12.2 (Document Reference 5.2.12.2) presents the identification confidence levels for each species across the survey period. The average monthly identification rate has been checked and an average of 96.05% was obtained.</p>
MOR_053_077_220 623	<p>63. NRW (A) notes that most birds recorded in Table 5 with no species ID were potentially auks.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_078_220 623	<p>1.5.2.9 Draft Report to Inform Appropriate Assessment (RIAA) – Appendix 1 Habitats Regulations Assessment Screening Report</p> <p>64. As the Morecambe generation assets project is located wholly in English waters, NRW (A)'s primary area of interest for offshore ornithology for this project is on impacts to Welsh designated sites.</p>	The Applicant notes your response.
MOR_053_079_220 623	<p>65. The Morecambe generation assets HRA screening and Stage 2 RIAA have been based on only 12 months of digital aerial survey data. Although NRW (A) note that a further 12 months have been collected, they are not presented and analysed for review in the PEIR and associated HRA Documents. Until the full data set is available, NRW (A) are not in a position to agree to any conclusions as there isn't adequate survey data to screen out sites and/or species. At present NRW (A) consider that all Welsh sites (SPAs/Ramsar's/SSSIs) designated for seabirds and wintering estuarine birds should be screened in.</p>	<p>The Applicant notes your response. Project-alone and in-combination assessments in the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) have been updated considering the full 24 months of baseline survey data. The screening of SPAs and Ramsar sites has been discussed and agreed through the Expert Topic Group (ETG) process and was set out in the HRA Screening Report (Document Reference 4.10) Welsh sites have been assessed in the RIAA in accordance with the screening criteria set out in the HRA Screening Report. SSSIs were not relevant to the HRA, but it is noted that an assessment of effects on SSSIs (including Welsh sites) has been presented in Chapter 12 Offshore Ornithology (Document Reference 5.1.12) (Section 12.6.5).</p>
MOR_053_080_220 623	<p>1.5.2.10 Draft RIAA Appendix 1: Habitats Regulations Assessment Screening Report</p> <p>66. NRW (A) note the following regarding the LSE screening approach taken for offshore ornithology:</p> <ul style="list-style-type: none"> • Section 8.4.1 Seabirds non-breeding, Paragraph 214: For seabirds in the non-breeding season, potential connectivity has been assumed for Special Protected Area (SPA) populations that contribute >1% of the Biologically Defined Minimum Population Scales (DMPS) population. NRW (A) notes that this is not a standard approach and whilst it may seem broadly appropriate for this project, NRW (A) suggest that at this stage the applicability of the approach is discussed further through the relevant Expert Working Group (EWG). • Section 8.4.2 Migratory birds other than seabirds, Paragraph 216: A 100 km buffer has been used to screen SPAs/Ramsar's for migratory non-seabirds. NRW (A) advise that this is not a standard approach. NRW (A) recognise the need to identify a proportionate set of SPAs for a more detailed assessment and hence recommend that the merits of this approach be discussed further through the EWG. • Appendix 2 screening outcome for UK SPA and Ramsar Sites with ornithology qualifying features: Ynys Seiriol / Puffin Island SPA, Great cormorant: NRW (A) query the conclusion of significance of effect for this site and feature to be no LSE (screened out). This is because the justification column states, "Project beyond the published foraging range (mean max +1SD), therefore no connectivity during the breeding season. Screened in for non-breeding season effects as species was recorded during baseline surveys, and >1% of birds within the BDMPS 	<p>The Applicant notes your response. The approach to determining connectivity with SPAs and to screen sites for migratory non-seabirds has been discussed and agreed with Natural England through the Expert Topic Group (ETG), and reflects the SPAs assessed within the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9).</p> <p>The screening of the great cormorant feature of Ynys Seiriol / Puffin Island SPA has been checked and it is confirmed that this feature has been screened in and assessed within the RIAA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	region during this period will originate from this population.” NRW (A) advise that the screening of this site and feature is checked.	
MOR_053_081_220 623	1.5.2.11 Draft RIAA – Report to inform the Appropriate Assessment 67. As aforementioned, the assessments provided in the RIAA are based on only 12 months of digital aerial survey data. NRW (A) note that the assessments for a number of the Welsh designated sites are incomplete (e.g. Anglesey Terns SPA; Skomer, Skokholm and seas of Pembrokeshire (SSSP) SPA). This is because not all of the qualifying features that the HRA Screening Report has concluded to be screened in for LSE have been considered. NRW (A) Advise that once the full 24 months of data are available and the sites and features screened in for LSE have been reviewed, the RIAA should be reviewed and updated, and all relevant qualifying features of sites screened in should be assessed. NRW (A) are therefore unable to make any conclusive judgements as to levels of impact and significance of effect at this stage.	It is confirmed that the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) has been reviewed, based on the full 24 months of survey data. All sites screened into the assessment (i.e. where LSE was identified) are set out in the updated HRA Screening Report (Document Reference 4.10) and have been assessed in the updated RIAA.
MOR_053_082_220 623	68. NRW (A) advise that SPA/Ramsar citations, conservation objectives (often within core management plans) for Welsh designated sites can be accessed via: https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land-and-seas/find-protected-areas-of-land-and-sea/?lang=en . These should be considered in impact assessments. NRW (A) also advise that the new conservation advice package is now available for the Liverpool Bay SPA and is available from: https://publications.naturalengland.org.uk/file/4591112403812352 NRW (A) recommend that assessments need to be made against the new conservation objectives for the site.	The 2023 conservation package for Liverpool Bay has been used within the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9).
MOR_053_083_220 623	69. Consideration should be given to NRW (A) advice on the Environmental Impact Assessment methodologies above (e.g. regarding disturbance/displacement assessments and cumulative assessments) as these are also relevant for RIAA assessments for the project alone and in-combination. In addition, NRW (A) notes the following regarding the approaches taken for the assessments included for Welsh designated sites in the draft RIAA: <ul style="list-style-type: none"> • With Reference to Liverpool Bay SPA red-throated diver, Paragraph 1.319, NRW (A) notes that there was insufficient data to assess graduated displacement over 10 km buffer (as was advised by NE). This should be reviewed for analysis of the full data set once the 24 months of data are available. NRW (A) also highlight the potential to consider other relevant data sources if the projects survey data proves insufficient (e.g. Seabird Sensitivity and Mapping Tool, SeaMaST: 	The Applicant notes your response. <p>Displacement assessment for red-throated diver is presented in the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9) has been based on the full 24-month survey dataset.</p> <p>It has been confirmed that the 24 months of data were insufficient to enable model-based density estimates for red-throated diver to be calculated. It was therefore agreed with Natural England during Expert Topic Groups (ETGs) that a weighted average displacement rate would be calculated, using the displacement gradient provided by Natural England. This was the same approach used in the draft PEIR and was considered to provide a suitable (and precautionary) level of assessment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0106366</p> <ul style="list-style-type: none"> <li>• Liverpool Bay SPA red-throated diver (paragraphs 1.320, 1.322 & Table 8.6): NRW (A) does not agree with the calculation of an 'effective displacement area' as there is no logical way to proportionally reduce the area of effective habitat loss by the expected level of displacement. The displaced proportion of the red-throated diver population cannot use any of the area – displacement occurs over the full extent of the area. Birds that are not displaced are likely (but not necessarily) dispersed over the entire area. Ultimately, the approach taken appears to incorrectly downplay the % of the SPA that is subject to displacement effects. NRW (A) consider that variable displacement rate should be applied to abundance figures and not to the area of effective habitat loss. Therefore, for the submission, NRW (A) advise that the area of effect within the SPA is calculated for both the original and extended SPA boundaries, without reducing the area proportionally according to the level of displacement of red-throated diver expected to occur. <li>• NRW (A) also advise that the area of the SPA subject to displacement for red-throated diver is considered in-combination with other plans and projects. 	<p>The Applicant does not agree that application of the displacement gradient to the effective area of displacement was without merit. It has been established that the displacement effect would diminish as distance from the windfarm increases, and therefore it was logical to conclude that the effective area would also be reduced. It has been acknowledged that the application of a linear displacement gradient was a proxy, but it should be noted that the total (uncorrected) values (i.e. without the application of the gradient) have also been presented for comparison within the RIAA. Red-throated diver displacement values for both the original and updated SPA boundary have been presented in the RIAA. This matter has been discussed with Natural England during ETG meetings.</p> <p>It is confirmed that the area of displacement for red-throated diver has been considered within the in-combination assessment within the RIAA.</p>

<p>MOR_053_084_220 623</p>	<ul style="list-style-type: none"> • With Reference to Section 8.8 Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA & SSSP SPA Manx shearwater, no evidence has been provided in the draft RIAA to support the assertion that 50% displacement for Manx shearwater can be considered realistic and NRW (A) note that there is currently no evidence for any particular range of displacement rates (1-10%, 50%, 30-70% or any other) for this species from offshore wind farms. Therefore, NRW (A) suggest that once the full dataset has been analysed, the whole apportioned annual matrices are provided for these sites and that these indicate where 1% of baseline mortality of the relevant colonies is exceeded. NRW (A) would then suggest that any further approach to the assessment is discussed collaboratively through the EWG. NRW (A) also recommend that following this, the appropriate impact figures for the Morecambe generation assets project to take through to the in-combination assessments for Manx shearwater at these sites is discussed through the EWG. • Furthermore, no consideration has been given to potential impacts of lighting during any phase on Manx shearwater at these sites. Deakin et al., (2022) notes that a higher level of disturbance to shearwaters and petrels may occur during the construction phase, when activity, noise and light levels may be greatest. • Apportionment of impacts to colonies in the non-breeding season(s): It appears that the number of adult birds at colonies (e.g. SSSP SPA Manx shearwater Section 8.9.2.1 and Grassholm SPA gannet, Section 1.572) used in the non-breeding season(s) apportionment are not those from the Tables in Appendix A of Furness (2015) and are updated colony figures. However, the respective non-breeding season(s) BDMPS total figures used in the calculations have not been updated to account for new colony data and use those presented in the tables in Appendix A (Furness 2015). NRW (A) do not consider this to be appropriate as updating the SPA colonies figures presented in the tables in Appendix A of Furness (2015) with more recent figures is not recommended, unless there is evidence to suggest that the colony in question has increased or decreased significantly relative to other colonies. • As an example, the proportion of SSSP SPA adult Manx shearwaters present at the Morecambe site during the migration seasons should be calculated using the information in Table 13 of Furness (2015) and calculated as: During the migration seasons for the UK western waters and Channel BDMPS, the number of SSSP SPA adult birds is 700,000 whilst the total number of Manx shearwaters of all ages across the BDMPS is 1,580,895 birds. Therefore, the proportion of SSSP SPA adult birds across the BDMPS during the migration seasons can be calculated as 44.3% (and not 57.6% as presented in Paragraph 1.549). 	<p>Manx shearwater are generally considered to have a low susceptibility to disturbance and displacement, based on previous studies (e.g. as set out in Bradbury et al. (2014)). A rate of 50% was therefore considered suitably precautionary; however, the assessment considered a range of displacement and mortality values (i.e. 30-70% and 1-10% respectively), and the full range has been made available (within Appendix 12.1 (Document Reference 5.2.12.1)) should NRW require this in order to consider its position.</p> <p>The most recent MS report on OWF lighting impacts on Manx shearwater (Deakin et al. 2022) has been considered in the Environmental Statement, and the conclusions of this Referenced in the Report to Inform Appropriate Assessment (RIAA) (Document Reference 4.9). Overall, it was considered that lighting was not likely to significantly affect Manx shearwaters, and that any such impacts would not affect the conclusions of the assessment.</p> <p>It is confirmed that the approach to apportioning outside of the breeding season has been updated in the RIAA in accordance with NRW's advice.</p> <p>The projects considered for the in-combination assessment have been agreed with Natural England through the ETG process.</p>
--------------------------------	---	--

	<p>Taking the same approach for Grassholm SPA gannets, NRW (A) advise the proportions of Grassholm SPA adult gannets present at the Morecambe site during the autumn and spring should be 14.4% and 11.9% respectively (rather than the 13.19% and 10.88% as presented in Section 1.572).</p> <ul style="list-style-type: none">• In-combination assessments: In addition to NRW (A) comments above regarding data for existing projects to include in assessments, the in-combination assessment of impacts from other plans and projects should include all plans/projects located within foraging range of the colony in question in the breeding season and for the non-breeding season(s) should include impacts from a wider range of projects, i.e. all those located within the relevant non-breeding season BDMPS in Furness (2015). NRW (A) advise that all impacts should be scoped into the in-combination assessments, i.e. impacts that do not result in >1% increases of baseline mortality should still be considered - project alone impacts considered to be negligible should not be.	
--	---	--

Unique Reference Identifier	Consultation response received	Applicant response
MOR_053_085_220 623	1.6 Seascape, Landscape and Visual Impacts 1.6.1 Detailed Comments 70. NRW (A) note that Chapter 5, Project Description, Table 5.2 confirms that the tallest blade tip height within the design envelope for Morecambe is 345 m above highest astronomical tide which is 350 m above mean sea level.	The Applicant notes your response.
MOR_053_086_220 623	71. NRW (A) advise that offshore turbines with tip heights up to 350 m have an average 46.5 km buffer for low magnitudes of effect. Low magnitude buffer distances are an indication that there is a likelihood that there would be no significant effects on a high sensitivity receptor for the size of wind turbine at, or beyond, the distance stated. Designated landscapes on the north coast of Wales are all further than 46.5 km from the Morecambe Array Area. The Clwydian Range and Dee Valley AONB is the closest at approximately 47 km at its nearest point to the Array. The closest parts of Eryri NP and the Isle of Anglesey AONB are over 55 km from the Array.	The Applicant notes your response.
MOR_053_087_220 623	72. The SLVIA scopes out North Wales from the landscape and seascape assessment but includes two viewpoints from within the Clwydian Range and Dee Valley AONB which are assessed in Appendix 18.3, SLVIA Viewpoint Assessment. The closest to the development is viewpoint 19 which is located at the northern edge of the AONB, 48.65 km from the nearest turbine. The SLVIA concludes that the visual effect at this location would be moderate/minor and not significant. Potential cumulative effects are also assessed to be not significant (moderate/minor).	Effects on seascape, landscape and visual receptors in Wales have been scoped out as not significant in the assessment undertaken in Section 18.5.3.5 of Chapter 18 Seascape, Landscape and Visual Impact Assessment (Document Reference 5.1.18). This is due to the distance of the windfarm site and the number and extent of existing offshore windfarm developments off the Welsh coast. An assessment of representative viewpoints in North Wales has been undertaken in Appendix 18.3 (Document Reference 5.2.18.3) and visualisations from viewpoints in North Wales are presented in Figure 18.40 – Figure 18.46.
MOR_053_088_220 623	73. Based on the distances of separation and the existing landscape/seascape context NRW (A) are satisfied with the decision to scope out designated landscapes in Wales from the landscape and seascape assessments. NRW (A) agree with the conclusions on visual effects reached in the SLVIA with regards to Viewpoint 19 and note that from locations in the Clwydian Range and Dee Valley AONB the development would be seen in the context of and behind more prominent turbines located closer to shore within existing offshore wind developments.	Effects on seascape, landscape and visual receptors in Wales have been scoped out as not significant in the assessment undertaken in Section 18.5.3.5 of Chapter 18 Seascape, Landscape and Visual Impact Assessment (Document Reference 5.1.18). This is due to the distance of the windfarm site and the number and extent of existing offshore windfarm developments off the Welsh coast. An assessment of representative viewpoints in North Wales has been undertaken in Appendix 18.3 (Document Reference 5.2.18.3) and visualisations from viewpoints in North Wales are presented in Figure 18.40 – Figure 18.46.
MOR_053_089_220 623	74. NRW (A) have no further comments at this stage regarding the proposals or SLVIA. If the proposals materially change between the PEIR and ES, such as by moving the array area significantly southwards or significantly increasing the height of the turbines, NRW (A) would be happy to review again.	The windfarm site boundary has not changed to the south. Since the publication of the PEIR, the spatial extent of the windfarm site has been reduced eastward and the maximum assumed WTG height has been reduced. This results in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs would be smaller.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_054_001_170 423	Thank you for the notice of this DCO application. We understand that this development is not in our area and the landfall for any onshore development is not in Wales, so we would have no interest in this application. If our assumptions about the location of all elements of this scheme being within England are incorrect, please let me know.	The Applicant notes your response.
MOR_055_001_170 423	We have no comment, please refer to the relevant sewerage and water undertaker for this area Morecombe which maybe United Utilities.	The Applicant notes your response.
MOR_056_001_220 623	I write to confirm the safeguarding position of the Ministry of Defence (MOD) in relation to the request made by the applicant for comment on Preliminary Environmental Information Report (PEIR). This proposal seeks consent to develop the offshore components of the Morecambe Offshore wind farm, which are the subject of this PEIR prepared by the applicant. As such, no details of export cable routes, land fall or onshore have been provided or assessed.	The Applicant notes your response.
MOR_056_002_220 623	The submitted PEIR relates only to the generation assets which would be located in the east Irish Sea, approximately 30km from the shore of the Lancashire coast. The development would comprise the following infrastructure components: a maximum of 40 wind turbine generators (with a maximum blade tip height of 345 metres above Lowest Astronomical Tide (LAT)), inter-array cables, offshore substation platforms, and possible platform link cables to connect offshore substations.	The Applicant notes your response.
MOR_056_003_220 623	The PEIR recognises the principal defence issues that could be impacted by the progression of the proposed development. In Chapter 16: Civil and Military Aviation and Radar (22/03/2023) of the PEIR, the developer reflects the content of a previous MOD response to consultation dated 31 March 2022.	The Applicant notes your response.
MOR_056_004_220 623	The use of airspace in the vicinity of the proposed development for defence purposes has been appropriately identified and considered, the requirement to supply sufficient information to allow accurate charting of the development and for the installation of appropriate aviation safety lighting is addressed in section 16.3.3.3 Marking and Lighting. The mandatory requirements set out in Civil Aviation Authority publication CAP 393 for aviation safety lighting are specifically Referenced.	The Applicant notes your response. The mandatory marking and lighting requirements are set out as embedded mitigation in Section 16.3.3.3 in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).
MOR_056_005_220 623	The PEIR details the potential for radar systems to be affected by the proposed wind farm, highlighting the potential for the development to be within radar line of sight (RLoS) of radar systems at Warton and Great Dun Fell. I can confirm that we do not anticipate that the development would have an operational impact on either of the identified radars. An assessment of the location of the offshore element of the development	Following the publication of the Preliminary Environmental Information Report (PEIR), the Ministry of Defence has confirmed that the Project would not have an operational impact on Warton Primary Surveillance Radar so further assessment of the receptor is considered unnecessary.

Unique Reference Identifier	Consultation response received	Applicant response
	<p>has confirmed that the proposed development area does not overlap with any military danger areas or Practice and Exercise Areas (PEXA). We do not therefore anticipate there to be any concerns relating to military maritime activities. I trust this clarifies our position on this consultation. Please do not hesitate to contact me should you wish to consider these points further.</p>	

2 Statutory Consultation

2.1 Section 47 responses to statutory consultation and Applicant regard

Unique Reference Identifier	Consultation response received	Applicant response
MOR_057_001_170423	In Reference to all the wind farm projects, planned, They'll be an eyesore,	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18 Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_057_002_170423	and a barrier to fish, dolphin, and whale migration; during their construction and usage;	<p>In June 2022, the Applicant published a Scoping Report, which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicant’s Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys, including two years of aerial survey data for ornithology and marine mammals, to understand the potential impacts during the construction, operation and maintenance, and decommissioning, phases of the Project, and identified appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated, where appropriate, and included in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life, including barrier effects to migratory fish and marine mammals are presented in the following chapters of the Environmental Statement:</p> <ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) • Chapter 12: Offshore Ornithology (Document Reference 5.1.12)
MOR_057_003_170423	also, economically, interfere with local fishing.	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicant’s Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources were used to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identified appropriate mitigation that could be embedded into project design for any significant impacts.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated and presented in Chapter 13 Commercial Fisheries (Document Reference 5.1.13). An Outline Fisheries Liaison and Co-Existence Plan (Document Reference 6.3) has also</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>been submitted with the DCO Application which details engagement with the fishing industry would be taken forward to mitigate any potential effects.</p>
MOR_057_004_170423	<p>Furthermore, they'll be a significant hazard to bird migration. They'll also be an ecological disaster in terms of the energy used to manufacture them and transport and erect them; let alone the extra energy consumed to service and maintain them.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources. Project specific surveys, including two years of aerial survey data for ornithology and marine mammals, were used to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identified appropriate mitigation that could be embedded into project design for any significant impacts.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated where appropriate and included in the respective chapters of the Environmental Statement.</p> <p>The assessments considered disturbance and displacement, collision risk and indirect effects on habitats, prey species and migratory species.</p> <p>No significant adverse effects were identified for the Project alone, including risk of bird collisions with wind turbine generators, which was assessed as no greater than minor, and not significant for the Project alone for all species recorded in flight at the Project's windfarm site.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments can be found in Chapter 12: Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12), Chapter 21 Climate Change (Document Reference 5.1.21) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p> <p>A Port Access and Transport Plan would need to be approved by the local highway authorities as set out as a requirement in the draft DCO in the unlikely event that major windfarm components are planned to be transported by road. This has been scoped out of assessment based on precedent from several recently approved offshore windfarm DCOs.</p>
MOR_057_005_170423	<p>Additionally, they'll be a danger to shipping, in particular the freight and passenger boat routes which could potentially become very hazardous in bad weather situations; do we really want another "Titanic disaster" close to our shores.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_057_006_170423	<p>In terms of aesthetics and other considerations, such as local income, is this "blot on the landscape" going to upset tourism?</p> <p>Surely a better plan would be by reducing electricity usage by better insulation of homes, less reliance on electric cars and cars in general - thereby, reducing waste and expense - and thinking more about alternative energy such as hydroelectric or even "domestic nuclear" and tidal power use for electricity rather than going down the route of Scotland: the latter ruining the landscape from ever-proliferating windmills!</p>	<p>To understand potential impacts to tourism, the Applicant drew the assessment on a range of publicly available statistics for the local study area as well as the UK as a whole.</p> <p>The tourism economy across the Local Economic Area is varied with multiple markets and assets which attract visitors. The overall assessment found the Project is expected to have no significant effects on the tourism economy and recreational activities.</p> <p>Further information on our assessments can be found in Chapter 20: Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20).</p> <p>Generation of energy from renewable sources has been recognised by the UK government as fundamental to UK energy policy and development of a low-carbon economy. The Clean Growth Strategy (Department for Business, Energy and Industrial Strategy (BEIS), 2017) outlined the UK government's goals to develop industries which are key to economic development, whilst simultaneously reducing the emission of greenhouse gases (GHG), offshore wind is recognised as having a beneficial impact towards both goals. This contributed to the commitment within the Sector Deal (HM Government, 2019) to increase offshore wind capacity.</p> <p>By 2030 the aim is to produce 40GW of offshore wind (a target increased to 50GW of offshore wind generated electricity in the British Energy Security Strategy (BESS), 2022). This ambitious net zero target will only be met by the crucial contribution from the offshore wind industry and is a substantial increase from the 14GW of offshore windfarms either fully commissioned or under construction, as of March 2021 (Gray, 2021).</p> <p>Further details are presented in Chapter 2: Need for the Project of the Environmental Statement (Document Reference 5.1.2) and Planning Development Consent and Need Statement (Document Reference 4.8).</p> <p>Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.</p>
MOR_058_001_190423	Besides wind farms being unsightly	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18 Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_058_002_190423	and detrimental to wild life. With insignificant benefits I say No No AND NO!!!	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement (Document Reference 5.1.1 to 5.1.23).</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p>
MOR_059_001_190423	Do you have a map of the proposed route the cable Will Go	<p>Information on the onshore cable route for the Morgan and Morecambe Offshore Wind Farms: Transmission Assets is presented in Chapter 23 Summary_Generation and Transmission Assets Assessment (Document Reference 5.1.23) and Chapter 23 Summary_Generation and Transmission Assets Assessment Figures (Document Reference 5.3.23).</p>
MOR_060_001_190423	<p>Theme 2: Landscape and visual impact</p> <p>As a resident of the Isle of Man I am concerned about the potential disruption to our ferry services to and from the island. These ferries are our lifelines, not only for getting on and off the island but also for food, mail and all other items needed for us to live. The Irish Sea is very rough very often and our ferry captains need to have the knowledge and confidence that if they need to alter course in a safe way they have the room to do that.</p> <p>These location of these proposed windfarms should be reconsidered.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_061_001_190423	<p>There is no provision for the Isle of Man ferries and all your wind farms are in the way of our travel routes, move them north or south but just so they are not in the way of the current ferry routes.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_062_001_190423	Impact to lifeline sailings to Isle of Man Steam Packet Company means I would not be supportive of this	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_063_001_190423	I shall be brief. My wife and I wish strongly to support the building of wind farms as quickly as possible.	The Applicant notes your response.
MOR_064_001_190423	Theme 2: Landscape and visual impact This will make the Isle of Man ferry route unsafe. I do not approve.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_065_001_200423	The Port of Silloth has no objections to this development as it falls outside the main routes to and from the port, thus it has no effect on our routes, costs or timings for vessel calls.	The Applicant notes your response.
MOR_066_001_200423	I 100% agree with all forms of green alternatives	

Unique Reference Identifier	Consultation response received	Applicant response
MOR_068_001_210423	<p>Theme 2: Landscape and visual impact</p> <p>Worried about disruption to IOM Steam Packet routes - specifically bad weather routes. Impact on journey times.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_069_001_210423	<p>Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>The Morecambe Offshore Wind Farm is a very welcome development in our local offshore wind capacity. Together with the existing Walney windfarms, this will help us generate more renewable energy as well as more well-paid local jobs. The work done on the project date seems exemplary and I wish the team well as they steer this project towards the construction and commissioning stages to come.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_069_002_210423	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>The Morecambe Offshore Wind Farm is a very welcome development in our local offshore wind capacity. Together with the existing Walney windfarms, this will help us generate more renewable energy as well as more well-paid local jobs during the construction, commissioning, and operational stages of its lifecycle. The opportunities for local people are hugely welcome.</p>	<p>The Applicant has also submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11). Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Applicant will also seek to maximise the local benefits where possible associated with the development construction, operations and maintenance, and decommissioning phases of the Project through its procurement and supply chain process.</p>
MOR_069_003_210423	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>The Morecambe Offshore Wind Farm is a very welcome development in our local offshore wind capacity. Together with the existing Walney windfarms, this will help us generate more renewable energy as well as more well-paid local jobs during the construction, commissioning, and operational stages of its lifecycle. The opportunities for local people are hugely welcome</p>	<p>The Applicant notes the comments in relation to job creation and would like to draw attention to Chapter 20: Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20), which outlines the potential economic benefits including job creation of the Project.</p> <p>The Applicant has also submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11). Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Applicant will also seek to maximise the local benefits where possible associated with the development construction, operations and maintenance, and decommissioning phases of the Project through its procurement and supply chain process.</p>
MOR_069_004_210423	<p>1.14 Socioeconomics, Tourism and Recreation</p> <p>The Morecambe Offshore Wind Farm is a very welcome development in our local offshore wind capacity. Together with the existing Walney windfarms, this will help us generate more renewable energy as well as more well-paid local jobs.</p>	<p>The Applicant notes your response.</p>
MOR_069_005_210423	<p>1.15 Climate Change</p> <p>The Morecambe Offshore Wind Farm is a very welcome development in our local offshore wind capacity. Together with the existing Walney windfarms, this will help us generate more renewable energy and meet our ambitious carbon targets. The project should be hugely welcomed and encouraged at all levels.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_070_001_210423	Theme 4: Land use and agriculture Aside from concerns around marine habitat	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicant’s Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life are presented in the following chapters of the Environmental Statement:</p> <ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) • Chapter 7: Marine Geology, Oceanology and Physical Process (Document Reference 5.1.7)
MOR_070_002_210423	the main concern is the potentially hugely negative impact upon the Isle of Man ferry routes. These routes have been used for decades and are essential to our Island and our quality of life. To jeopardise that or to prevent the safety routes needed in bad weather or otherwise to force re routing will have a hugely negative impact on our whole community.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company’s (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_071_001_210423	<p>We have received the consultation letter for the Morecambe Offshore Wind Project and would just like to feedback and share our support for the project.</p>	<p>The Applicant notes your response.</p>
MOR_072_001_210423	<p>Hello, as a resident of the Isle of Man and frequent user of the ferries I object to the three wind farms straddling or interfering with the vital ferry routes to Liverpool and Heysham which serve the IOM. The Irish Sea is big enough to harvest wind without placing the farms directly in these important routes. The ferries already take a long time and journey times should not be extended further to circumnavigate wind farm fields.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_073_001_210423	<p>I would like to register my strong approval for the proposed Morecambe wind farm. This is because projects like these are essential to help deal with climate change.</p> <p>I completed the online form, but it failed to submit at the very end.</p>	<p>The Applicant notes your response. Further details are presented in Chapter 21 Climate Change of the Environmental Statement (Document Reference 5.1.21).</p> <p>We are sorry to hear of the issues you experienced whilst attempting to submit your feedback online. This was raised with the web team to address and prevent any further issues.</p>
MOR_074_001_210423	<p>I live in the Isle of Man and am deeply concerned and opposed to your application to develop the Morecambe Offshore Wind Farm if it stops the Isle of Man's boats (freight, food, provisions and passengers) travelling to and from the Isle of Man. It is our lifeline. Please do not shut us off!!!</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_075_001_220423	<p>Theme 2: Landscape and visual impact I am in favour</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_076_001_220423	<p>Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>The cumulative affect of Morecambe, Mona, and Morgan concentrate marine traffic increasing the risk of collision and allusion. Generous sea corridors must be created to mitigate these risks.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_077_001_220423	I think it is a good idea.	The Applicant notes your response.
MOR_078_001_220423	<p>Theme 2: Landscape and visual impact</p> <p>A significant technological and civil engineering project that I believe should be supported by all residents in the north west of England. It will help in establishing an energy secure future for the whole of Great Britain.</p>	The Applicant notes your response.
MOR_078_001_240423	<p>Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>Turning the whole Windfarm area into a no fishing no dredging site could be celebrated as a wildlife recovery programme and something locals could be proud of. Such a</p>	<p>The Applicant notes your response.</p> <p>Pot fishing is the primary activity within the windfarm site. Whilst the Applicant notes your response of earmarking the windfarm site as a no fishing or dredging zone, this is not within the gift or control of the Project. The Applicant recognises the need to co-exist with other industries in the area.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>project could support local initiatives with a bit of imagination.</p>	
<p>MOR_078_002_240423</p>	<p>1.4 Fish and Shellfish Ecology In David Attenborough's recent programmes 'Wild Isles' showing the state of the natural world in the UK he highlights the damaging effects of dredging for scallops on the sea bed. Have you explored the possibility of earmarking the complete windfarm site as a no fishing and no dredging zone?? There are two such sites around our coast so far and this seems a perfect opportunity to try and make the area a national park for wildlife albeit under the sea.</p>	<p>Whilst the Applicant notes your response of earmarking the windfarm site as a no fishing or dredging zone, this is not within the gift or control of the Project. The Applicant recognises the need to co-exist with other industries in the area.</p>
<p>MOR_078_003_240423</p>	<p>1.6 Offshore Ornithology Any help provided to prevent birds colliding with the turbines should be undertaken, and opinions from other windfarms and scientists should be sought.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources. Project specific surveys – including two years of aerial survey data for ornithology and marine mammals – were used to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation that could be embedded into project design for any significant impacts.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated where appropriate and included in the respective chapters of the Environmental Statement.</p> <p>The assessments considered disturbance and displacement, collision risk and indirect effects on habitats, prey species.</p> <p>No significant adverse effects were identified for the Project alone, including risk of bird collisions with wind turbine generators, which was assessed as no greater than minor, and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>not significant for the Project alone for all species recorded in flight at the Project's windfarm site.</p> <p>To reduce the risk of bird collision, the Project has increased the air gap from 22m to 25m above Highest Astronomical Tide (HAT). Further information can be found in Chapter 12: Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p>
MOR_078_004_240423	<p>1.7 Commercial Fisheries</p> <p>Banning fishing across the whole site would be worthwhile and go some way to mitigating the visual impact of the turbines. Local people could then take pride in their wildlife sea park which would be supporting nature's recovery.</p>	<p>Whilst the Applicant notes your response on banning fishing across the whole windfarm site as a no fishing or dredging zone, this is not within the gift or control of the Project. The Applicant recognises the need to co-exist with other industries in the area.</p>
MOR_079_001_240423	<p>Q1 Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>No</p>	<p>The Applicant notes your response.</p>
MOR_079_002_240423	<p>Q2 Do you have any comments on our work to understand the technical and environmental constraints of the areas offered to us by the Crown Estate as part of its round 4 leasing process?</p> <p>No</p>	<p>The Applicant notes your response.</p>
MOR_079_003_240423	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>No</p>	<p>The Applicant notes your response.</p>
MOR_079_004_240423	<p>Q4 Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm?</p> <p>No</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_079_005_240423	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>As previously stated there should be no interference with IOM Steam packet bad weather routes. I have serious concerns about the effect of the wind farm on the shipping lanes. The Isle of Man relies on efficient shipping for 364 days a year for people /cars/goods /food etc. There needs to be sufficient leeway in the shipping lanes for alternative routes in bad weather to keep the risk of cancellation of sailings to a minimum both to Liverpool and Heysham. If there are cancellations of shipping to the IOM due to insufficient bad weather routes due to positioning of the wind farm this will affect IOM tourism</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_079_006_240423	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>No</p>	The Applicant notes your response.
MOR_079_007_240423	<p>1.1 Marine Geology, Oceanography and Physical Processes.</p> <p>No</p>	The Applicant notes your response.
MOR_079_008_240423	<p>1.2 Marine Sediment and Water Quality</p> <p>No</p>	The Applicant notes your response.
MOR_079_009_240423	<p>1.3 Benthic Ecology</p> <p>No</p>	The Applicant notes your response.
MOR_079_010_240423	<p>1.4 Fish and Shellfish Ecology</p> <p>No</p>	The Applicant notes your response.
MOR_079_011_240423	<p>1.5 Marine Mammals</p> <p>No</p>	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_079_012_240423	1.6 Offshore Ornithology No	The Applicant notes your response.
MOR_079_013_240423	1.7 Commercial Fisheries No	The Applicant notes your response.
MOR_079_014_240423	1.8 Shipping and Navigation I have serious concerns about the effect of the wind farm on the shipping lanes. The Isle of Man relies on efficient shipping for 364 days a year for people /cars/goods /food etc. There needs to be sufficient leeway in the shipping lanes for alternative routes in bad weather to keep the risk of cancellation of sailings to a minimum both to Liverpool and Heysham.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_079_015_240423	1.9 Marine Archaeology and Cultural Heritage No	The Applicant notes your response.
MOR_079_016_240423	1.10 Civil and Military Aviation and Radar No	The Applicant notes your response.
MOR_079_017_240423	1.11 Infrastructure and Other Users No	The Applicant notes your response.
MOR_079_018_240423	1.12 Seascape, Landscape and Visual Impact Assessment (SLVIA) No	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_079_019_240423	<p>1.14 Socioeconomics, Tourism and Recreation</p> <p>If there are cancellations of shipping to the IOM due to insufficient bad weather routes due to positioning of the wind farm this will affect IOM tourism</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p> <p>Disruption of ferry operations and potential impacts have been considered in Chapter 20 Socio Economics (Document Reference 5.1.20).</p>
MOR_079_020_240423	<p>1.15 Climate Change</p> <p>No</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_080_001_240423	<p>Theme 2: Landscape and visual impact</p> <p>As an Isle of Man Resident my concern is that the proposed wind farm encroaches on the Shipping Routes that the Steam Packet Company use to serve the Island from Heysham and Liverpool. From the information available the wind farms will affect both the Fair weather and Rough Weather routes leading to disruption of essential supplies to the Island. The final scheme must address the needs of the Island community and ensure safe navigation passages for the vessels that serve it.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_081_001_240423	<p>As an Isle of Man Resident my concern is that the proposed wind farm encroaches on the Shipping Routes that the Steam Packet Company use to serve the Island from Heysham and Liverpool. From the information available the wind farms will affect both the Fair weather and Rough Weather routes leading to disruption of essential supplies to the Island. The final scheme must address the needs of the Island community and ensure safe navigation passages for the vessels that serve it.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_082_001_240423	<p>I received your card in the post requesting feedback on the Morgan and Morecambe Offshore Wind projects, and the necessary transmission assets.</p> <p>I'm happy to say I approve of all three going ahead. We need to move towards sustainable power and reduce fossil fuel use much faster than we are doing.</p>	<p>The Applicant notes your response.</p> <p>Consideration of our assessments to regarding climate change is presented in Chapter 21 Climate Change (Document Reference 5.1.21). Further information on the need for renewable energy is presented in Chapter 2 Need for the Project (Document Reference 5.1.2) and Planning Development Consent and Need Statement (Document Reference 4.8).</p>
MOR_082_002_240423	<p>I would hope that construction would be carried out in a way that causes minimal disruption to marine wildlife, that would be my only concern.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life are presented in the following chapters of the Environmental Statement:</p> <ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) • Chapter 12: Offshore Ornithology (Document Reference 5.1.12) <p>Specific mitigation measures which aims to monitor and reduce impacts to marine wildlife are also outlined in the Schedule of Mitigation (Document Reference 5.5), Outline In</p>

Unique Reference Identifier	Consultation response received	Applicant response
		Principle Monitoring Plan (to monitor any potential effects) (Document Reference 6.4) and Draft Marine Mammals Mitigation Protocol (Document Reference 6.5)
MOR_083_001_240423	<p>I am a resident on the Isle of Man.</p> <p>I do agree there is a need for clean electricity, by wind farms.</p>	The Applicant notes your response. The Applicant would like to draw your attention to Chapter 2 Need for the Project (Document Reference 5.1.2) and Planning Development Consent and Need Statement (Document Reference 4.8).
MOR_083_002_240423	However I disagree if this effects essential shipping routes to a Island that is dependent on the North West.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_083_003_240423	For our essential supplies food, medicine, building materials agriculture materials and live animals vechicals and vechical parts, tourism both ways arrive from Isle of man, Heysham and Liverpool. Going further by sea adds to pollution and costs to all of us. Please consider our Isle of man Shipping routes.	Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p> <p>Further information on our assessments can be found in Chapter 20: Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20).</p>
MOR_084_001_260423	<p>1.8 Shipping and Navigation</p> <p>The windfarm cannot affect the vital shipping route and access required between the Isle of Man and Heysham/Liverpool. There needs to be flexibility to alter the route based on weather/sea conditions and building the windfarm directly on the route could negatively impact the ability of the ferry to sail. This must be taken into consideration as access between the UK and Isle of Man is essential for the Island.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).
MOR_084_002_260423	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>How is the project going to benefit the Manx economy?</p>	<p>The Applicant notes your response.</p> <p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_084_003_260423	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>The windfarm cannot affect the vital shipping route and access required between the Isle of Man and Heysham/Liverpool. There needs to be flexibility to alter the route based on weather/sea conditions and building the windfarm directly on the route could negatively impact the ability of the ferry to sail. This must be taken into consideration as access between the UK and Isle of Man is essential for the Island.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_084_004_260423	<p>1.16 Traffic and Transport The windfarm cannot affect the vital shipping route and access required between the Isle of Man and Heysham/Liverpool. There needs to be flexibility to alter the route based on weather/sea conditions and building the windfarm directly on the route could negatively impact the ability of the ferry to sail. This must be taken into consideration as access between the UK and Isle of Man is essential for the Island.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_085_001_260423	<p>Theme 2: Landscape and visual impact The map on the card that came through the door and also the map in the newspaper failed to show the key ports that provide the Isle of Man with its lifelines. Its less than honourable not to mark them and to mark the Steam Packet Company ferry routes. Are you hoping to ignore the elephant in the room?</p>	<p>The Applicant has noted the feedback on the consultation post card content. The purpose of the consultation post card was to promote the statutory consultation for the Project and present the locations of the public consultation events. The postcard included a QR code and website details pointing to where more detailed information on the Project could be found.</p> <p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation</p>

Unique Reference Identifier	Consultation response received	Applicant response
		Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).
MOR_085_002_260423	<p>I am entirely positive about the concept of offshore wind farms. In this case, however, the Isle of Man stands to gain little direct benefit and yet its lifelines are threatened by the location of these fields. The Steam Packet Company estimates that 50 sailings a year may have to be cancelled. The Irish Sea is notoriously stormy and ships cannot run when there is danger of being blown into a Wind Farm. I therefore strongly object to this project and to the way it has been presented in printed literature sent to island residents and published in the papers. Missing Liverpool and Heysham off the maps shows less than full understanding that you are threatening our supply lifelines.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p> <p>The Applicant has noted the feedback on the consultation literature. The purpose of the consultation post card and printed advertisement was to promote the statutory consultation for the Project and present the locations of the public consultation events. The postcard included a QR code and website details pointing to where more detailed information on the Project could be found.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_086_001_260423	I should like to support new windfarms in these areas, providing that these re not a hazard to shipping.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_087_001_280423	Terraocan can offer full support through the group: Engineering & Marine Services: Quayside Mooring, Inshore Mooring, Offshore Mooring: FEED / Feasibility studies: Structural / Fatigue Analysis: Cable Lay / Pull-in Analysis: Stability Analysis: Sea-fastening Design and Installation: Mooring Design and Analysis: Environmental Transit Assessment: Electrical and Mechanical Engineering:	<p>The Applicant notes your response.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant would encourage any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_088_001_280423	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>I hope you're well. As a experienced technician/supervisor in the offshore wind industry who resides in Lancashire, it's refreshing to see new developments on the West Coast. Is there any information available to what port you will be using</p>	<p>The Applicant notes your response. The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. The Application has considered a number of ports within the UK as part of the DCO application, and a decision on the port selection will be made post consent.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	for the project? And where will the O&M building will be located?	
MOR_089_001_280423	<p>Theme 2: Landscape and visual impact</p> <p>Well, nice you UK wants " green" energy. But gets the Isle of Man the energy? Main practical objections are the ferry connections. These will be in jeopardy. This will increase the costs of crossing permanently , so the inflation will rise even more for the Isle. Do we get compensation? Remember 70% of the food price is energy price.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_089_002_280423	Second objection with declining workforce due to ageing are there enough people to maintain these windfarms in the way going forward?	<p>The Applicant has submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11). Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant would encourage any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_089_003_280423	<p>- Oil and gas are plant based</p> <p>The earth is 6 bln years old and never has been the same, change is part of life/ evolution, warm and cold periods are part of this evolution. No scientists needed.</p>	The Applicant notes your response.
MOR_090_001_300423	<p>I would like to formally object to the Morecambe Offshore Wind Farm as proposed for the following reasons.</p> <p>Whilst I am supportive of the principle of offshore wind as source of renewable energy the siting for future wind farms in the Irish Sea must not compromise the different routes that Isle of Man Steam Packet Company vessels need to take to travel from Douglas to Heysham, Liverpool, Belfast and Dublin.</p> <p>The Steam Packet Company's lifeline services sustain our island community providing vital all year round transport and supply links for food, medicine and other essential goods. The Isle of Man Steam Packet Company vessels need to be able to safely navigate in all weathers and all normal and rough weather routes need to be safeguarded.</p> <p>I have serious concerns about the cumulative effect the numerous Irish Sea wind farm projects will have on the viability of these routes.</p> <p>As a consequence I am opposed to the proposed locations and extent of area of the proposed Mona, Morecambe and</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Morgan Wind farms. The cumulative impact of one or more of these going ahead as proposed would sever both the usual and rough weather routes used by the Isle of Man Steam Packet Company vessels traveling from Douglas to Heysham and Liverpool.</p> <p>The plans should be modified to retain sufficiently wide and safe shipping lanes which allow the Isle of Man Steam Packet Company vessels to use the usual and rough weather routes unimpeded and without any lengthening of journey times or negative impact on days of operational due to weather conditions.</p> <p>Without sufficiently wide and safe shipping lanes there is a danger that if there are any accidental collisions or other maritime problems involving Irish Sea shipping in the area that any resulting spillages or vessels drifting onto land will adversely impact on the Island's marine nature reserves and UNESCO Biosphere designation.</p>	
MOR_090_002_300423	<p>In addition the project should also ensure that there is not an adverse impact on the Isle of Man Airport's radar and air traffic control or the operation of military jets by RAF or BAE Systems test flights for fast military jets from Warton – which in turn would jepodise the operation of the island lifeline commercial airline links (including patient transfers to UK hospitals) plus emergency air ambulance services to / from UK hospitals by fixed wing aircraft and Great North Air Ambulance Helicopters.</p>	<p>The Applicant is in ongoing engagement with Isle of Man Ronaldsway Airport (IoM Airport), Warton Aerodrome and other nearby airports.</p> <p>A detailed technical safeguarding analysis of Instrument Flight Procedures (IFP) was undertaken, confirming there is no impact to the IoM Airport. Radar Line of Sight analysis predicts a potential cumulative impact with the other Round 4 projects (Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project) to the IoM Airport's Primary Surveillance Radar (PSR) system. Engagement with the IoM Airport remains ongoing on this matter.</p> <p>A detailed technical safeguarding analysis of Radar Line of Sight analysis was undertaken, confirming there is no impact to Warton Aerodrome. IFP analysis predicts a potential impact. Engagement with the Warton Aerodrome remains ongoing on this matter. Engagement with the MOD remains ongoing on this matter.</p> <p>Further information on our assessments and proposed mitigation can be found in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_090_003_300423	<p>Each project should be considered cumulatively alongside existing Walney and other approved offshore windfarms, to ensure:</p> <ul style="list-style-type: none"> • The safety of navigation for ships when sailing through the wind farm corridors. • The enough open sea room remains for navigating in rough weather to avoid the increased risk of cancellations on the island's lifeline routes – which would affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods including food, mail and newspapers. • They do not lead to extra sailing distance being imposed on lifeline routes, which would consequently require more fuel, lead to increased fuel costs and ticket prices and greater CO2 emissions and threaten the feasibility of two return sailings per day all year round. • No adverse impact on lifeline air links to the Isle of Man (including commercial flights and air ambulance services). 	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_091_001_290523	<p>I would like to formally object to the Morecambe Offshore Wind Farm as proposed for the following reasons.</p> <p>Whilst I am supportive of the principle of offshore wind as source of renewable energy the siting for future wind farms in the Irish Sea must not compromise the different routes that Isle of Man Steam Packet Company vessels need to take to travel from Douglas to Heysham, Liverpool, Belfast and Dublin. The Steam Packet Company's lifeline services sustain our island community providing vital all year round transport and supply links for food, medicine and other essential goods. The Isle of Man Steam Packet Company vessels need to be able to safely navigate in all weathers and all normal and rough weather routes need to be safeguarded.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>I have serious concerns about the cumulative effect the numerous Irish Sea wind farm projects will have on the viability of these routes.</p> <p>As a consequence I am opposed to the proposed locations and extent of area of the proposed Mona, Morecambe and Morgan Wind farms. The cumulative impact of one or more of these going ahead as proposed would sever both the usual and rough weather routes used by the Isle of Man Steam Packet Company vessels traveling from Douglas to Heysham and Liverpool.</p> <p>The plans should be modified to retain sufficiently wide and safe shipping lanes which allow the Isle of Man Steam Packet Company vessels to use the usual and rough weather routes unimpeded and without any lengthening of journey times or negative impact on days of operational due to weather conditions.</p> <p>Without sufficiently wide and safe shipping lanes there is a danger that if there are any accidental collisions or other maritime problems involving Irish Sea shipping in the area that any resulting spillages or vessels drifting onto land will adversely impact on the Island's marine nature reserves and UNESCO Biosphere designation.</p>	<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_091_002_290523	<p>In addition the project should also ensure that there is not an adverse impact on the Isle of Man Airport's radar and air traffic control or the operation of military jets by RAF or BAE Systems test flights for fast military jets from Warton – which in turn would jeopardise the operation of the island lifeline commercial airline links (including patient transfers to UK hospitals) plus emergency air ambulance services to / from UK hospitals by fixed wing aircraft and Great North Air Ambulance Helicopters.</p>	<p>The Applicant is in ongoing engagement with Isle of Man Ronaldsway Airport (IoM Airport), Warton Aerodrome and other nearby airports.</p> <p>A detailed technical safeguarding analysis of Instrument Flight Procedures (IFP) was undertaken, confirming there is no impact to the IoM Airport. Radar Line of Sight analysis predicts a potential cumulative impact with the other Round 4 projects (Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project) to the IoM Airport's Primary Surveillance Radar (PSR) system. Engagement with the IoM Airport remains ongoing on this matter.</p> <p>A detailed technical safeguarding analysis of Radar Line of Sight analysis was undertaken, confirming there is no impact to Warton Aerodrome. IFP analysis predicts a potential impact. Engagement with the Warton Aerodrome remains ongoing on this matter. Engagement with the MOD remains ongoing on this matter.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments and proposed mitigation can be found in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).</p>
MOR_091_003_290523	<p>Each project should be considered cumulatively alongside existing Walney and other approved offshore windfarms, to ensure:</p> <ul style="list-style-type: none"> • The safety of navigation for ships when sailing through the wind farm corridors. • The enough open sea room remains for navigating in rough weather to avoid the increased risk of cancellations on the island’s lifeline routes – which would affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods including food, mail and newspapers. • They do not lead to extra sailing distance being imposed on lifeline routes, which would consequently require more fuel, lead to increased fuel costs and ticket prices and greater CO2 emissions and threaten the feasibility of two return sailings per day all year round. • No adverse impact on lifeline air links to the Isle of Man (including commercial flights and air ambulance services). 	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_092_001_290423	<p>I am a resident of the Fylde.</p> <p>I would like to know what impact this project is set to have on marine life in the Irish Sea, as a result of assessment, installation, maintenance and general operation.</p> <p>What assessments have been done in this regard?</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life are presented in the following chapters of the Environmental Statement:</p> <ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) • Chapter 12: Offshore Ornithology (Document Reference 5.1.12)
MOR_093_001_300423	<p>I am writing in Reference to all three proposals for offshore wind farms in the Irish Sea. I am very much in favour of wind farms in general, but I live on the Isle of Man and I am very much concerned on the impact these wind farms could have on our shipping route between the Isle of Man and the UK. Looking at your map, there's not a lot of room for ships to pass through, whether for passengers or containers bringing food and other supplies to the island. In poor weather, when ships may need to take alternative routes, it is very likely that this could mean longer journeys to avoid wind turbines or no crossings for periods of time in the winter. This is my concern. One wind farm would not cause too many difficulties, but 3, alongside the Mona proposition, I fear would routes to the Isle of Man too much.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_094_001_300423	I've just come across this project, is there any information on the construction of this wind farm? More so, will the port of barrow play any role in it?	<p>Further information regarding the proposed construction methodology for the windfarm can be found in Chapter 5: Project Description of the Environmental Statement (Document Reference 5.1.5).</p> <p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection and heliport selection will be made post consent. We will continue to engage with Spirit Energy as further details are defined.</p>
MOR_095_001_300423	<p>I have serious reservations with regard to the positioning of the Morecambe Offshore wind farm. The footprint of the farm appears to encroach on the ferry route between Douglas and Liverpool.</p> <p>As the Isle of Man is totally dependent on the ferry service between the UK mainland and the Island, any structures or other impediments which may obstruct the route or result in delays or cancellations would be totally unacceptable.</p> <p>It is difficult to understand why the boundaries of the wind farm should be delineated in a way which may impede the ferry route. The ferries travel between two fixed points whereas one assumes that the wind is not restrained by fixed lines or boundaries and blows throughout the Irish Sea. The wind farm can be placed to avoid any interference to shipping lanes.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>I suggest that the wind farm boundaries be redrawn to avoid any interference with the ferry routes to the Isle of Man.</p>	<p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
<p>MOR_096_001_010523</p>	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>I trust that there is adequate liaison between yourselves and the Isle of Man Steam packet regarding impact on routes and travel distance and times given the location of this proposed windfarm in light of the others already planned, proposed or under development or in operation within the Irish Sea. This should ensure that significant impact on travel distance and time is not required regardless of the weather/sea conditions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_096_002_010523	<p>Q4 Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm?</p> <p>As indicated previously I am interested in preserving the existing shipping routes to and from the Isle of Man for ferry and freight traffic. I am also interested in adoption of all best practise in order to minimise all aspects of the environmental impact of the development - eg EMF/damage to the sea bed and its ecology, vibration and noise and its impact on marine life or minimising bird strike frequency.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys, to understand the potential impacts during the construction, operation and maintenance, and decommissioning, phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life are presented in the following chapters of the Environmental Statement:</p> <ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) <p>To reduce the risk of bird collision, the Project has increased the air gap from 22m to 25m above Highest Astronomical Tide (HAT). Further information can be found in Chapter 12: Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p>
MOR_096_003_010523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>Please ensure that there is an adequate navigation channel left clear for Isle of Man Steam packet ferry routes (or any other freight carriers) between the Isle of Man and both Heysham and Liverpool without significant increase in distance, in fair and poor weather (in light of all the other wind farm developments in this part of the Irish Sea).</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_096_004_010523	<p>1.6 Offshore Ornithology</p> <p>I assume the latest best practice at the time (research into colouring or blades etc) will be adhered to/ adopted in order to minimise the likelihood and/or frequency of bird collisions etc.</p>	<p>The colour scheme for nacelles, blades and towers is expected to be RAL 7035 (light grey) or RAL 9010 (pure white) and the foundation steelwork RAL 1023 (traffic yellow) up to a minimum of 15m above HAT, to be determined by the relevant guidance and requirements closer to the time.</p> <p>This is presented in Chapter 5: Project Description (Document Reference 5.1.5), Chapter 12 Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p>
MOR_097_001_020523	<p>1.12 Seascope, Landscape and Visual Impact Assessment (SLVIA)</p> <p>Lots of excellent work gone into providing information for the public. My concern was the visual effect from shore but your information laid this to rest. From a member of the public view (without vested interest) all looks good and I am in favour of hoinv ahead.</p>	<p>The Applicant notes your response. Our latest assessment can be found in Chapter 18 Seascope, Landscape and Visual Impact Assessment (Document Reference 5.1.18).</p>
MOR_098_001_020523	<p>Theme 2: Landscape and visual impact</p> <p>I fully support the Offshore Wind Farm project. We all need this project to be operational as soon as possible.</p>	<p>The Applicant notes your response.</p>
MOR_099_001_020523	<p>For the Attention of Developers and The Planning Inspectorate</p> <p>In response to the current notices for the proposed projects listed below, I am pleased to submit this objection to the developers. This is also addressed to the Planning Inspectorate for their attention and response, regarding the application of the principles of the Rochdale Envelope. My concerns relate to the geographical extent of the proposed</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>wind farms and the adverse impact on navigation.</p> <ul style="list-style-type: none"> -Mona Statutory Notice -Morgan Offshore Generation Assets Statutory Notice -Morecambe Offshore Generation Assets Statutory Notice -Morgan and Morecambe Transmission Assets <p>Adverse Impacts on Navigation</p> <p>My objection regarding the adverse impacts of the above proposed developments on navigation refers in particular to the Isle of Man's lifeline ferry services. The Planning Inspectorate's website for Morgan Offshore Generation Assets, 10 October 2022, records the following communication from the Maritime and Coastguard Agency.</p> <p>"... I want to raise an early concern that (1) the three projects present concerns to safe navigation in the area and (2) I believe that separate planning applications would not provide a full representation of the impacts because of the risks they present cumulatively which probably most concern the MCA and other Navigation stakeholders."</p> <p>The Documents for the current proposals appear to show that the geographical extents of the schemes have not materially changed since the MCA expressed their concerns. Despite communications between the shipping interests and developers, I understand that the boundaries for the areas proposed for development remain a matter of concern for shipping operators, including the Isle of Man Steam Packet Company.</p>	<p>Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_099_002_020523	<p>Geographical Extent of Proposed Wind Farms Past experience shows that it is legitimate and reasonable to question the derivation of the geographical extent of the licence areas and of the actual development areas to be occupied by each of the proposed wind farms. The Crown Estate appears to define the licence areas with scant regard for navigation, and expects developers to thrash it out themselves. For example, the former (and subsequently abandoned) Rhiannon offshore wind farm licence area extended into and obstructed the established defined separated shipping lanes round Anglesey. Also, the Estate's defining Mona and Morgan as contiguous would clearly have resulted in a very major obstacle to navigation. The licence development areas are not set in stone, for example as demonstrated by the developer proposing to adopt less than the full licence area for development of Mona.</p> <p>A Request For More Information on Wind farm Extent and Layout Currently, there is free navigation over the whole area of the proposed wind farms. The custodian of the sea bed, the Crown Estate, has issued licences intended to allow developers to close off areas of the seas surface to navigation. Yet, it is the shipping interests who have been expected to justify their requirements for safe navigation. For an equitable balance between wind farms and shipping operation, it is now appropriate and not unreasonable to request that the developers justify the development areas actually needed. It is not adequate that they make Reference to the development areas as "maximum."</p> <p>Development of Wind Farms Proposals It appears that the geographical extents for licence and development were based initially on nominal capacity densities (MW/km²) for which there is extensive data for the British Isles and Europe. Subsequently, with the increasing data now available, the developers should now be able to provide more detail of their design parameters and proposals. Unfortunately, past experience elsewhere was that developers claimed that there were too many variables under consideration. Was their reluctance to provide details until as late as possible intended to put</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>The layout of the windfarm site would be finalised post- consent and in consultation with the relevant stakeholders. The Applicant would continue to engage with the Maritime Coastguard Agency and other appropriate stakeholders to agree the layout prior to construction</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>objectors at a disadvantage? Even though the developers may not have finalised design, it is reasonable to expect that they are now able to address and resolve fundamental inputs such as turbine specific power and Irish Sea wind data. Thus, they are able to narrow down their choices and become much more specific as to the actual layout pattern and area required. For example, the Documents state the minimum number (higher power) and maximum number (lower power) of wind turbines in each development, which indicates the chosen range of turbine capacities and rotor sizes.</p> <p>It would be misleading to suggest that there are too many variables to be more specific at this stage, as some variables cancel each other. For example, the area required for development is largely independent of rotor size (diameter). (The turbine power generated is proportional to the square of the rotor diameter. The wind turbine spacing is expressed as a multiple of rotor diameter, and thus the density of wind turbines is inversely proportional to the square of the rotor diameter. Thus to obtain the power capacity per unit area, the turbine power is multiplied by the density, and the diameters squared cancel out.)</p> <p>Application of Rochdale Envelope. The Rochdale Envelope (National Infrastructure Planning Advice Note 9) allows a degree of flexibility to address uncertainties. For offshore wind farms it notes (para 4.5) that these may include type and number of turbines. Para 4.12 refers to "robust worst case scenario(s)," which for offshore wind farms presumably includes overall geographical area for development.</p> <p>Notwithstanding this 'flexibility,' it now appears reasonable to request the developers to justify the actual development areas which they need. To give one specific example, what is the justification for the northern-most corner of Morgan to project apparently unnecessarily into the Douglas - Heysham shipping route?</p>	
MOR_100_001_020523	<p>Theme 2: Landscape and visual impact</p> <p>I fully support the Offshore Wind Farm project. We all need this project to be operational as soon as possible.</p>	The Applicant notes your response

Unique Reference Identifier	Consultation response received	Applicant response
MOR_101_001_020523	<p>Theme 2: Landscape and visual impact</p> <p>I would like to make my observations being someone who moved to Kinmel Bay from Kent some 3 years ago. When I first went to Rhyl to view the area I was living in, I was shocked at the amount of visible Wind Farms in the sea off of the Rhyl coastline which, in my view, could damage the already fragile economic community by future holiday makers deciding that North Wales is not for them because of the ugly coastline as it is quite off-putting to see a lot of windmills on the horizon such as they are. I was even more shocked to see that the view had also been vandalised by more windmills on the horizon from the Kinmel Bay coastline. I cannot help but wonder why we are still using windmills, and even solar panels for electricity generation when clearly, there may be a better alternative to these ugly monstrosities that permeate the coast line of North Wales. What about Tidal Turbine generation under the sea as there is no waste generated, and they just use natural tides from the sea and are more consistent than the wind or the sun. This could provide a better alternative to these already ugly skylines that just haunt our coastlines. Tidal Generation could be a less intrusive and more eco-friendly answer to the possible breaking of the North Wales economic future and I would urge companies and the Government to think hard and fast during the consultation period to the points raised in this letter and for the effect that planting more of the windmills on the sea bed in the Irish Sea may have on the wellbeing of both residents living in the area and tourists that visit North Wales.</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project, including north Wales, are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_102_001_030523	<p>This is a disruptive development affecting the freedom for I.O.M. residents & visitors Stops free flow of deliveries necessary for our Island, causing hardship & distress to us all. There are alternatives to this away from Irish Sea, find them & stop this proposed development NOW.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_103_001_030523	The placing of Morgan, Morcambe and Mona wind farms will affect the IOMSPC routes in bad weather by not having enough 'sea room' to navigate through them. Will the IOMSPC or IOM Government be compensated for this,	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_103_002_030523	as well as the loss of fishing grounds.	<p>Commercial fishing activity has been characterised using landings statistics, publicly available vessel data, and engagement with the fishing industry.</p> <p>Based on an analysis of the location of the Project, fishing activity is expected to be dominated by larger vessels potting for whelk, and to a lesser extent dredging for scallops. With additional mitigation for the construction period, Project effects have been assessed as minor.</p> <p>The Applicant confirms that a Fishing Liaison Officer (FLO) for the Project is in place to maintain regular communication with the local fishery associations. This is presented in the Outline Fisheries Liaison and Coexistence Plan (Document Reference 6.3) which has been included within the DCO application. The plan also refers to the process for justifiable evidence-based disturbance payments.</p> <p>Further information on our assessments can be found in Chapter 13: Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13).</p>
MOR_103_003_030523	Also what effect will they have on sea birds in the area.	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicant’s Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources. Project specific surveys – including two years of aerial survey data for ornithology and marine mammals – were used to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation that could be embedded into project design for any significant impacts.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated where appropriate and included in the respective chapters of the Environmental Statement.</p> <p>The assessments considered disturbance and displacement, collision risk and indirect effects on habitats, prey species.</p> <p>No significant adverse effects were identified for the Project alone, including risk of bird collisions with wind turbine generators, which was assessed as no greater than minor, and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>not significant for the Project alone for all species recorded in flight at the Project's windfarm site.</p> <p>To reduce potential risk of bird collision, the Project has also increased the air gap from 22m to 25m above Highest Astronomical Tide (HAT). Further information can be found in Chapter 12: Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p>
MOR_104_001_030523	I am opposed to these plans to build wind farms in the Irish sea. In my view they are ruining the land and seascape.	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_104_002_030523	They are a very expensive and unnecessary addition to the National grid. Spend the money building nuclear power stations and shale gas extraction.	The Applicant notes your response. The Applicant would like to refer you to Chapter 2 Need for the Project (Document Reference 5.1.2), the Planning Development Consent and Need Statement (Document Reference 4.8) and the National Policy Statements Accordance Report (Document Reference 4.14), which sets out the need for renewable energy projects and how the Project's proposals are in line with UK Government policy.
MOR_105_001_030523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Like most such consultations, there is little hope that the consultation is there to support a foregone conclusion - with a process heavily loaded towards it.</p>	<p>Statutory consultation is a key part of the planning and DCO application process. The Applicant takes consultation and engagement seriously to understand the views from stakeholders and communities.</p> <p>The Planning Inspectorate will examine the Project's DCO application, with input from interested parties and statutory consultees. The examination process also provides further opportunity for stakeholders to register as an interested party and have their views heard. Following the examination, the Planning Inspectorate will present its recommendation to the Secretary of State for Energy Security and Net Zero, who will then make the final decision on whether the DCO should be granted.</p> <p>The Applicant has submitted a Consultation Report (Document Reference 4.1) that explains how the Applicant has complied with the consultation requirements as set out in the Planning Act 2008 and had regard to all the feedback submitted.</p>
MOR_105_002_030523	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>There are no benefits to the Isle of Man community in this project</p>	<p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_105_003_030523	<p>1.12 Seascape, Landscape and Visual Impact Assessment (SLVIA)</p> <p>The existing Wind Turbines in the Irish sea are already visually intrusive - this proposal will compound that problem.</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_105_004_030523	<p>1.14 Socioeconomics, Tourism and Recreation The construction, installation and maintenance of yet more wind turbines makes a mockery of moves toward sustainable energy, since there is no practical way to store the energy when wind is not blowing at suitable levels - yet at enormous energy cost in creating this new short-life infrastructure</p>	<p>The Applicant notes your response. The Applicant would like to refer you to the following chapters of the Environmental Statement, which outlines the need for renewable energy projects:</p> <ul style="list-style-type: none"> • Chapter 2 Need for the Project (Document Reference 5.1.2) • Planning Development Consent and Need Statement (Document Reference 4.8). • Chapter 21 Climate Change (Document Reference 5.1.21)
MOR_106_001_030523	<p>Thank you for the postcard directing me to your websites. I wish to register my support for all three projects - as a farmer and landowner I feel renewable energy should be a priority in the UK. Given the past impact on farmland caused by nuclear energy -and current storage issues of nuclear waste I believe we must invest in a safer infrastructure for future energy requirements.</p>	<p>The Applicant notes your response.</p>
MOR_107_001_040523	<p>Theme 2: Landscape and visual impact As far as I can tell, this project will have no benefit for the Isle of Man,</p>	<p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_107_002_040523	<p>but will have a very large negative impact by restricting ferry route options during poor weather conditions. Prices of imported goods to the Isle of Man will inevitably go up as a result, and we won't even benefit from the new energy supply.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_108_001_090523	<p>1.8 Shipping and Navigation</p> <p>I am very concerned about the potential impact that these projects may have on shipping channels. It is my understanding that the projects could disrupt ferry travel between the UK and the Isle of Man, particularly during heavy weather, effectively isolating the Manx population.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_109_001_090523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>I feel that we are already suffering with the existing offshore wind farm as the manx ferry can no longer zigzag across the Irish sea in bad weather and as a result is often cancelled, which leaves the residents trapped and isolated. To build more can only exacerbate this problem.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_109_002_090523	<p>1.8 Shipping and Navigation</p> <p>I feel that we are already suffering with the existing offshore wind farm as the manx ferry can no longer zigzag across the Irish sea in bad weather and as a result is often cancelled, which leaves the residents trapped and isolated. To build more can only exacerbate this problem.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_110_001_090523	<p>Thank you for the card relating to the four consultations. We are residents of the Isle of Man and on looking at the map on the card immediately became concerned as the two ports to the east of the Isle of Man which are used by The Isle of Man Steam Packet Company [IOMSPC] are not shown.</p>	<p>The Applicant has noted the feedback on the consultation post card content. The purpose of the consultation post card was to promote the statutory consultation for the Project and present the locations of the public consultation events. The postcard included a QR code and website details pointing to where more detailed information on the Project could be found.</p>
MOR_110_002_090523	<p>The immediate implication is that you do not understand the importance to the Isle of Man of the routes to both Heysham and Liverpool.</p> <p>We firmly believe that the proposed developments cannot be considered in isolation and are therefore submitting this one response to all the proposals.</p> <p>Both shipping routes, used for a very long time by the IOMSPC, are a vital lifeline. Anything which disrupts the</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>regular sailings has massive implications in terms of food supplies and other freight to and from the Island. There is also the other important role provided by the IOMSPC, that of transferring people to appointments/treatment in UK hospitals where the patient is unable to fly.</p> <p>The IOMSPC [founded in 1830] has various longstanding routes used to both Heysham and Liverpool, each depending on prevailing weather conditions. We believe that the consequences of development at the proposed scale will potentially result in longer sailing times and, to ensure avoidance with the wind farms, will result in more frequent cancellations.</p> <p>We are not opposed to the principle of wind farm developments but are totally opposed to any such developments which will adversely impact on the services provided by the Isle of Man Steam Packet Company.</p> <p>We feel sure that the IOMSPC will be submitting their own response and are confident that it will be more detailed than the above.</p>	<p>Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_111_001_100523	<p>1.8 Shipping and Navigation</p> <p>I am concerned at the disruption to shipping especially the additional voyage times from/to the Isle of Man. This aspect seems to have been totally disregarded. Could consideration please be given to providing an access clearway?</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_111_002_100523	<p>Q4 Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm? I am concerned at the disruption to shipping especially the additional voyage times from/to the Isle of Man. This aspect seems to have been totally disregarded. Could consideration please be given to providing an access clearway?</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_111_003_100523	<p>1.16 Traffic and Transport</p> <p>I am concerned at the disruption to shipping especially the additional voyage times from/to the Isle of Man. This aspect seems to have been totally disregarded. Could consideration please be given to providing an access clearway? Increased travel times will have a significant time and cost impact on Isle of Man residents.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_112_001_110523	<p>Theme 2: Landscape and visual impact</p> <p>I wish to register my opposition to your MORCAMBE MONA & MORGAN Irish Sea plans.</p> <p>I am Manx living on the Isle of Man and STRONGLY OPPOSE the proposed expansion of the Irish Sea windfarms. The proposed site for these windfarms sits smack in the middle of the IOM - UK shipping routes. We depend upon these routes for trade, travel, and food supplies. Shipping cannot be constrained to narrow corridors as ships must have sea room and the option for rough weather routes. Having to divert around your windfarms will add time and therefore fuel and costs to the maritime lifelines we on the Isle of Man depend upon. I do not see why Manx people should, in effect, pay more in goods and transport to subsidise your customers electricity supply, whilst at the same time having to endure shortages of essentials which will result from the inevitable missed and</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key</p>

Unique Reference Identifier	Consultation response received	Applicant response
	cancelled sailings, caused by vessels not having sufficient sea room to operate safely due to your windfarm.	<p>stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_113_001_120523	<p>I live on the Queen promenade, and paid a premium to do so.</p> <p>Considering that this project will be detrimental to my outlook over the Irish Sea why haven't I been contacted and made aware of this?</p>	<p>The Applicant undertook an extensive campaign using a variety of different communications channels to promote the consultation, making stakeholders and communities aware, and is outlined in the Statement of Community Consultation and Consultation Report (Document Reference 4.1). In summary, this included but not limited to, the following:</p> <ul style="list-style-type: none"> • Posting in excess of 130,000 consultation post cards to addresses in England, north Wales and the Isle of Man • A dedicated consultation website containing all consultation materials • Displaying posters at prominent locations • Issuing two press releases to local media • Running two rounds of advertising in regional print media • Digital advertising on media platforms, such as Google and Spotify • A series of posts via the Flotation Energy social media accounts. <p>A series of in-person consultation events were also held, including one event in Blackpool.</p> <p>To view the application Documents and to participate in the examination process, please visit www.national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010121.</p> <p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_114_001_120523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Not really. My main concern is the obstruction of this wind farm will cause to Isle of Man ferries.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_114_002_120523	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>I cant see many. There may be the odd job. But theres no promotion of UK manufacturing I suspect.</p>	<p>The Applicant notes the comments in relation to benefits. The potential benefits of the Project are set out in each of the Environmental Statement Chapters,</p> <p>The Applicant has submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11). Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_114_003_120523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>It will be detrimental to supply, movement of people and tourism on the aisle of Man because of the likely impact on ferry sailings in poor weather.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_114_004_120523	<p>1.1 Marine Geology, Oceanography and Physical Processes.</p> <p>I am concerned about damage to the sea bed and the creatures that live there.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys, such as benthic ecology, marine mammals and offshore ornithology, to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>included in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life are presented in the following chapters of the Environmental Statement:</p> <ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) • Chapter 12: Offshore Ornithology (Document Reference 5.1.12)
MOR_114_005_120523	<p>1.4 Fish and Shellfish Ecology</p> <p>Damage to their habitat is not desirable.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicant’s Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys, such as benthic ecology, marine mammals and offshore ornithology, to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life are presented in the following chapters of the Environmental Statement:</p> <ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) • Chapter 12: Offshore Ornithology (Document Reference 5.1.12)

Unique Reference Identifier	Consultation response received	Applicant response
MOR_114_006_120523	<p>1.5 Marine Mammals</p> <p>There are lots of sea mammals and cetaceans that live and operate around Isle of Man.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicant’s Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys, such as benthic ecology, marine mammals and offshore ornithology, to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life are presented in the following chapters of the Environmental Statement:</p> <ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) • Chapter 12: Offshore Ornithology (Document Reference 5.1.12)
MOR_114_007_120523	<p>1.7 Commercial Fisheries</p> <p>Our fishermen need every help. If they cant fish in that are now, I would be angry on their behalf.</p>	<p>Commercial fishing activity has been characterised using landings statistics, publicly available vessel data, and engagement with the fishing industry.</p> <p>Based on an analysis of the location of the Project, fishing activity is expected to be dominated by larger vessels potting for whelk, and to a lesser extent dredging for scallops. With additional mitigation for the construction period, Project effects have been assessed as minor.</p> <p>The Applicant confirms that a Fishing Liaison Officer (FLO) for the Project is in place to maintain regular communication with the local fishery associations. This is presented in the Outline Fisheries Liaison and Coexistence Plan (Document Reference 6.3) which has been included within the DCO application. The plan also refers to the process for justifiable evidence-based disturbance payments.</p> <p>Further information on our assessments can be found in Chapter 13: Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_114_008_120523	<p>1.8 Shipping and Navigation</p> <p>This is a big one for me. I live on IOM. Having moved from the UK recently, its been so easy to take travel around the UK totally for granted. The ferries are a lifeline for movement of people and supplies, and tourism too. If theres more likelihood of ferry cancellations due to poor weather in the winter months especially, this will hurt the island badly. People need to be able to travel so they can be sure if getting home for work and education. These windfarms will make travel less reliable.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_114_009_120523	<p>1.12 Seascape, Landscape and Visual Impact Assessment (SLVIA)</p> <p>Im one of those people who thinks theyre ugly and they spoil a good view.</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_114_010_120523	1.14 Socioeconomics, Tourism and Recreation See shipping above.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_114_011_120523	<p>1.15 Climate Change</p> <p>This is just nonsense. I have a as feeling the turbines will have been made in China using fossil fuel power and materials so lets stop this charade if promoting them as being green. We need to generate power where its actually needed ie near cities.</p>	<p>The Applicant notes your response. The Applicant would like to refer you to the following chapters of the Environmental Statement, which outlines the need for renewable energy projects:</p> <ul style="list-style-type: none"> • Chapter 2 Need for the Project (Document Reference 5.1.2) • Planning Development Consent and Need Statement (Document Reference 4.8) • Chapter 21 Climate Change (Document Reference 5.1.21)
MOR_115_001_120523	<p>Interest :</p> <p>Services we offer: • Positioning during cable installation including processing data from their own ploughs and trenching machines: • Pre and post lay/trenching surveys on our vessels and on board theirs Landfall surveys: Engineering for beach pull: • Asset Support: Vessel class inspections including underwater hull gauging Lifting gear inspection and maintenance: • Marine Project Management: • U/W and Aerial Surveys and Inspection: • Installation & Construction Support: • Above water Inspection and Maintenance: • Floating Wind Solutions:</p>	<p>The Applicant notes your response. The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant would encourage any relevant suppliers to register their interest, so they can help to deliver this important Project.</p>
MOR_116_001_120523	<p>Theme 2: Landscape and visual impact</p> <p>That taking into consideration other current proposals for windfarms, ferry routes from the Isle of Man to the UK will be unduly constrained and will disrupt, prolong and/or increase the cost of seaborne traffic to and from the Isle of Man, with no concomitant benefit to the Isle of Man and its residents.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_117_001_140523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>I have attended a public consultation event. The staff and the displays were extremely informative and I was impressed by the detail of planning and the consideration given to the potential impact of the project. I am convinced of the benefits of wind generated energy and fully support this extension in Morecambe Bay.</p>	The Applicant notes your response.
MOR_118_001_150523	These sitings are a potential obstacle to IOM to UK shipping and transport by ferry especially in times of bad weather	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_119_001_160523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>I feel that this project is not in the interest of the Isle of Man and its residents.</p>	<p>The Applicant has submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11). Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The IoM is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_119_002_160523	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>Risks damage to the Isle of Man and its economy.</p>	<p>Consideration of potential effects to the economy is presented in Chapter 20 Socio-economics, Tourism and Recreation (Document Reference 5.1.20).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_119_003_160523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>Threatens the safe year round navigation of the vital Manx ferry links to England. This project threatens the life line ferry service to the Isle of Man.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_119_004_160523	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>This has no benefit to the Isle of Man.</p>	<p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_119_005_160523	<p>1.8 Shipping and Navigation</p> <p>This project threatens the life line ferry service to the Isle of Man.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_119_006_160523	1.15 Climate Change There is no benefit to the Isle of Man's climate goals.	<p>Consideration of the wider effects on climate change is presented in Chapter 21 Climate Change (Document Reference 5.1.21).</p> <p>The IoM is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>Alongside energy supply security, offshore wind projects bring significant benefits to their local communities, and the Applicant believes it is important that the local supply chain contributes to this too.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_120_001_160523	<p>I do not think you have considered the people who live on the Isle of Man and how they travel off the Island. This shows a lack of consideration on your part for the problems of getting off the Island, and the Steam Packet Company which needs a straight and direct run to Liverpool for passengers leaving the Island. This will result in an increase of fares and longer sailing times.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_120_002_160523	<p>The Mona wind farm is directly in the way of the Island and Liverpool affecting passengers who need hospital appointments and those who need to take a vehicle. I am disgusted by your total lack of consideration.</p>	<p>This Consultation Report solely relates to the Morecambe Offshore Windfarm Generation Assets. The Applicant has no further comment as feedback refers to the Mona Offshore Wind Project.</p>
MOR_121_001_160523	<p>Re: Mona Offshore Wind Project, Morgan Offshore Wind Project Generation Assets, Morecambe Offshore Windfarm Generation Assets & Morgan and Morecambe Offshore Wind Farms: Transmission Assets.</p> <p>Thank you for the opportunity to comment on the above proposals.</p> <p>We would initially state that we support the development of sustainable energy generation, to mitigate the effects of Climate Change.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_121_002_160523	<p>However, these developments need to be planned carefully, with due consideration on its impact on the Isle of Man. As an Island, we are reliant on our sea links for both passenger travel and for all our freight, including the majority of the food that we consume. Any impact on the sea links, however small, could have a major impact on the Island, particularly during times of inclement sea conditions. In fact, the island already regularly experiences significant disruptions during the winter, including depleted supermarket food shelves, when the boats cannot sail due to poor weather, and this issue could be exasperated by narrowing available sea routes.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_121_003_160523	<p>The following image, from the consultation portals, provides the overall layout of the proposed developments, and it is clear, even without technical knowledge, that the location of these proposals has potential to impact on the important sea links that connect the Isle of Man to the UK. As we are not experts in maritime matters, we would therefore refer you to the observations of the Isle of Man Steam Packet Company, who have responsibility to maintain the important sea links that the Island is dependent on;</p> <p>https://www.bbc.co.uk/news/world-europe-isle-of-man-63588474 https://www.steam-packet.com/information/news/2022/Nov/Potential_wind_farm_projects</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>The following is an extract from the article on the Steam Packet website;</p>	<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_121_004_160523	<p>KEY CONCERNS</p> <ul style="list-style-type: none"> • The safety of navigation for ships when sailing through the wind farm corridors. • The lack of open sea room for navigating in rough weather is likely to increase risk of cancellations on the island's lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods. • The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions. Protect lifeline services steampacket.com Please consider the cumulative effects of all Irish Sea wind farm projects on the Island's lifeline routes. 	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_121_005_160523	<p>Serving our island community since 1830 Map is for illustrative purposes only and is not drawn to scale.</p> <p>The following image illustrates the potential conflict between the current ferry routes between the Island and Heysham & Liverpool, neither of which were identified on the maps on the consultation portals;</p>	<p>The Applicant has noted the feedback on the consultation post card content. The purpose of the consultation post card was to promote the statutory consultation for the Project and present the locations of the public consultation events. The postcard included a QR code and website details pointing to where more detailed information on the Project could be found.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_121_006_160523	<p>Whilst separate consultations are being held for the four separate proposals, it is clear that all four should be considered as one, to assess their overall impact.</p> <p>As the proposals are only at consultation stage, we hope and trust that the concerns of the Steam Packet Company are taken on board fully and suitable solutions found, to ensure that the people of the Isle of Man are not impacted negatively by these proposals.</p> <p>For and on behalf of Hartford Homes</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_122_001_170523	<p>1.16 Traffic and Transport</p> <p>As an Isle of Man resident, I feel that our vital ferry routes to Heysham and Liverpool are not being taking into account. Our island risks being cut off from the outside work for days or even weeks in the winter, because the wind farms will reduce the routes available for the ferries in rough seas.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_122_002_170523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>The project would make it more difficult for the Isle of Man ferries to operate in rough seas.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_122_003_170523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>The project would make it more difficult for the Isle of Man ferries to operate in rough seas.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_123_001_190523	<p>1.8 Shipping and Navigation Please do not block or inconvenience the ferry/shipping routes between the Isle of Man and the UK. They need a wide corridor so they have route options according to conditions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_123_002_190523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>Please do not block or inconvenience the ferry/shipping routes between the Isle of Man and the UK. They need a wide corridor so they have route options according to conditions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_123_003_190523	<p>1.16 Traffic and Transport Please do not block or inconvenience the ferry/shipping routes between the Isle of Man and the UK. They need a wide corridor so they have route options according to conditions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_124_001_210523	<p>Theme 2: Landscape and visual impact This proposal would cause major issues around travel to and from the Isle of Man - as a resident I feel if this project goes ahead we will lose out massively. It blocks our main sailing routes</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_124_002_210523	and is of no benefit to the island itself. Clearly this has not been considered when the plans were put forward.	<p>The IoM is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_125_001_220523	I'm concerned about the impact of completely covering the Irish sea in this way. I'm generally very in favour of offshore wind power, but there appears to be large fields of turbines already and the size of these proposals looks to be filling in the gaps. I think there needs to be serious consideration of the impact of vital transport links to the isle of man including ferries from Liverpool and Heysham	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_125_002_220523	and of providing fairness to fishing in the area.	<p>Commercial fishing activity has been characterised using landings statistics, publicly available vessel data, and engagement with the fishing industry.</p> <p>Based on an analysis of the location of the Project, fishing activity is expected to be dominated by larger vessels potting for whelk, and to a lesser extent dredging for scallops. With additional mitigation for the construction period, Project effects have been assessed as minor.</p> <p>The Applicant confirms that a Fishing Liaison Officer (FLO) for the Project is in place to maintain regular communication with the local fishery associations. This is presented in the Outline Fisheries Liaison and Coexistence Plan (Document Reference 6.3) which has been included within the DCO application. The plan also refers to the process for justifiable evidence-based disturbance payments.</p> <p>Further information on our assessments can be found in Chapter 13: Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_126_001_240523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)? Please consider the cumulative effects of all Irish Sea wind farm projects on the Isle of Mans lifeline routes.</p> <p>The Morgan windfarm sits directly on the current sailing route for the Isle of Man Steam Packet Company's twice-daily return sailings between the Isle of Man and Heysham, it also impacts the seasonal sailings between the Isle of Man and Liverpool. For this reason the project should not be approved. My main concerns are:</p> <ol style="list-style-type: none"> 1. The safety of navigation for ships when sailing through the wind farm corridors. 2. The lack of open sea room for navigating in rough weather is likely to increase risk of cancellations on the island, Ås lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods. 3. The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions. <p>The Morecambe field alone would be fine but the combined impact of Morecambe and Morgan needs to be taken into consideration when deciding on the future of the Morecambe project</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_126_002_240523	<p>Q6 Do you have any comments on anything else within this consultation? see earlier comments regarding the impact on the Isle of Man's lifeline sailing routes</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_126_003_240523	1.8 Shipping and Navigation see general comments above	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_127_001_250523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Useful consultation Documents picked up today at Waitrose Formby. Staff on hand to answer questions. I support this development.</p>	The Applicant notes your response.
MOR_127_002_250523	<p>Q2 Do you have any comments on our work to understand the technical and environmental constraints of the areas offered to us by the Crown Estate as part of its round 4 leasing process?</p> <p>No comment</p>	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_127_003_250523	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>It will provide local short term and long term employment in our local region. Presume</p>	<p>The Applicant has submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11).</p> <p>Given the size and scale of the Project, we recognise this plan will need to deliver benefits for the Local Economic Area. Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Applicant will also seek to maximise the local benefits where possible associated with the development construction, operations and maintenance, and decommissioning phases of the Project through its procurement and supply chain process.</p>
MOR_127_004_250523	<p>Q4 Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm?</p> <p>I support the expansion of windpower for the UK and consider the proposed development to be in a suitable location near to centres of population. Only problem is what happens when the wind doesn't blow. UK energy policy needs appropriate backup electricity storage facilities such as pumped hydro.</p>	<p>The Applicant notes your response.</p>
MOR_127_005_250523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>No comment, except that this must have been addressed already for shipping between Dublin and Liverpool ports.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.
MOR_127_006_250523	Q6 Do you have any comments on anything else within this consultation? No thank you.	The Applicant notes your response.
MOR_127_007_250523	1.1 Marine Geology, Oceanography and Physical Processes. No comment, except that the Fracking proposals on New Preston Road drew a lot of protests.	The Applicant notes your response.
MOR_127_008_250523	1.2 Marine Sediment and Water Quality No comment	The Applicant notes your response.
MOR_127_009_250523	1.3 Benthic Ecology No comment	The Applicant notes your response.
MOR_127_010_250523	1.4 Fish and Shellfish Ecology I think there will be negligible impact	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapters of the Environmental Statement. The assessments on</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_127_011_250523	<p>1.5 Marine Mammals I think there will be negligible impact</p>	<p>fish and shellfish can be found in Chapter 10 Fish and Shellfish of the Environmental Statement (Document Reference 5.1.10).</p> <p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life are presented in the following chapters of the Environmental Statement:</p> <ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) • Chapter 12: Offshore Ornithology (Document Reference 5.1.12)
MOR_127_012_250523	<p>1.6 Offshore Ornithology I think there will be negligible impact</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapters of the Environmental Statement.</p> <p>The assessments on marine life are presented in the following chapters of the Environmental Statement:</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<ul style="list-style-type: none"> • Chapter 9: Benthic Ecology (Document Reference 5.1.9) • Chapter 10: Fish and Shellfish Ecology (Document Reference 5.1.10) • Chapter 11: Marine Mammals (Document Reference 5.1.11) • Chapter 12: Offshore Ornithology (Document Reference 5.1.12)
MOR_127_013_250523	<p>1.7 Commercial Fisheries Presumably this is no different to other areas in the North Sea and off Scotland.</p>	<p>Commercial fishing activity has been characterised using landings statistics, publicly available vessel data, and engagement with the fishing industry.</p> <p>Based on an analysis of the location of the Project, fishing activity is expected to be dominated by larger vessels potting for whelk, and to a lesser extent dredging for scallops. With additional mitigation for the construction period, Project effects have been assessed as minor.</p> <p>The Applicant confirms that a Fishing Liaison Officer (FLO) for the Project is in place to maintain regular communication with the local fishery associations. This is presented in the Outline Fisheries Liaison and Coexistence Plan (Document Reference 6.3) which has been included within the DCO application. The plan also refers to the process for justifiable evidence-based disturbance payments.</p> <p>Further information on our assessments can be found in Chapter 13: Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13).</p>
MOR_127_014_250523	<p>1.8 Shipping and Navigation May impact on services between Heysham and IoM. Area prone to bad winter weather.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>(IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_127_015_250523	1.9 Marine Archaeology and Cultural Heritage I lived in Kirkham for 10 yrs and am not aware of any sites on Fylde which are of special significance except the duck pond at Wrea Green.	As the Project is completely offshore, the Applicant believes this feedback is associated with the Morgan and Morecambe Offshore Wind Farms: Transmission Assets. The Applicant has no further comment.
MOR_127_016_250523	1.10 Civil and Military Aviation and Radar Presume you are aware of the nuclear fuel site at Springfields Salwick.	As the Project is completely offshore, the Applicant believes this feedback is associated with the Morgan and Morecambe Offshore Wind Farms: Transmission Assets. The Applicant has no further comment.
MOR_127_017_250523	1.11 Infrastructure and Other Users Area has good road transport links which serve tourists going to Blackpool.	The Applicant notes your response.
MOR_127_018_250523	1.12 Seascape, Landscape and Visual Impact Assessment (SLVIA) I would say this stretch of coast was particularly attractive.	The Applicant notes your response.
MOR_127_019_250523	1.16 Traffic and Transport I cannot envisage any particular difficulties except additional traffic during construction. I would suggest that drivers undergo enhanced driver training.	The Applicant notes your response. Major components required for the Project are anticipated to be transported by sea. However, a Port Access and Transport Plan has been conditioned in our draft DCO if major impacts on the road network are expected.
MOR_127_020_250523	1.14 Socioeconomics, Tourism and Recreation I don't think it will have any impact on Blackpool tourism, and may even be an added attraction. We live fairly close to the windfarm off Liverpool and N Walers coast.	The Applicant notes your response. Consideration of potential effects to tourism is presented in Chapter 20 Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20).
MOR_127_021_250523	1.15 Climate Change Wind Power is good for the environment.	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_128_001_250523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>I'm heartily in favour of windfarms BUT concerned about birds and creatures whose home you will be destroying.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources. Project specific surveys – including two years of aerial survey data for ornithology and marine mammals – were used to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation that could be embedded into project design for any significant impacts.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated where appropriate and included in the respective chapters of the Environmental Statement.</p> <p>The assessments considered disturbance and displacement, collision risk and indirect effects on habitats, prey species.</p> <p>No significant adverse effects were identified for the Project alone, including risk of bird collisions with wind turbine generators, which was assessed as no greater than minor, and not significant for the Project alone for all species recorded in flight at the Project's windfarm site.</p> <p>Further information on our assessments can be found in Chapter 12: Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12), Chapter 9 Benthic Ecology (Document Reference 5.1.9) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_128_002_250523	I'm assuming attempts will be made not to spoil land and views where infra structure is sited o shore.	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_128_003_250523	There must be statistics about the damage done to wildlife but I couldn't find it	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement. The PEIR is available to view on our website at www.morecambeandmorgan.com/morecambe.</p> <p>Please visit www.national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010121 to view the DCO Application Documents including the Environmental Statement.</p>
MOR_129_001_250523	<p>Having spent some time looking at the projects for the Morecombe, Morgan and Mona windfarms in the Irish sea you are undertaking, from what I have ascertained, besides a wider aspect of renewable energy rather than fossil/carbonised fuels for the environment, there is no benefit for anyone in the Isle of Man, just likely cost increases as the boat link to the Isle of Man, for both passenger and freight, which, will no doubt see costs rise due to the extra time it will take to travel/move freight. Having watched your webinar, within the project the changes to the maritime routes was classed within the overall scope of the project as an issue, but not significant, which is something that I do understand.</p> <p>Resulting from this, one of the key concepts I have taken when running projects during my working life is managing critical non essentials, and for the people of the Isle of Man, this will be seen as critical as soon as the reality hits that there will be an impact to their pocket/travel times will/could be longer.</p> <p>In considering this I believe that from a project/business perspective there is an opportunity to create visibility and a local brand awareness of the wider positive impacts this will bring and with this an aspect of Corporate and Social Responsibility.</p> <p>Isle of Man Netball are looking for sponsors/partners to support their growth from grass roots netball through to our performance squad, who are currently ranked 26th in the World. Isle of Man Netball are, with the exception of our</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Development Officer run fully by volunteers, and any funds generated go directly to supporting the growth of netball on the Island.</p> <p>I understand the email address is just for the Morgan project, If you could please forward onto the correct team, as I think overall, this is a combined request and I would welcome the opportunity to discuss this further with the appropriate department/persons.</p>	

Unique Reference Identifier	Consultation response received	Applicant response
MOR_130_001_270523	<p>Theme 2: Landscape and visual impact</p> <p>As a resident of the Isle of Man and father of teenage children, I strongly support the development proposed and urge the parties to ensure minimal disruption to ferry routes.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_131_001_270523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Project generally does not seem to take much account of the impact of the restriction of shipping lanes on the economy and residents of the Isle of Man. Neither does there appear to be any benefit to the island in terms of access to the clean low cost energy produced</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_131_002_270523	<p>Q2 Do you have any comments on our work to understand the technical and environmental constraints of the areas offered to us by the Crown Estate as part of its round 4 leasing process?</p> <p>Unsatisfactory consideration of the impact on shipping lanes</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_131_003_270523	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy? Benefit to the UK from clean cheap energy and construction jobs, no visible benefit to the Isle of Man, but significant adverse impact</p>	<p>The Applicant has submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11).</p> <p>Given the size and scale of the Project, we recognise this plan will need to deliver benefits for the Local Economic Area. Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website () to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_131_004_270523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc. Insufficient account taken of disruption to shipping lanes</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_131_005_270523	<p>1.7 Commercial Fisheries Possible impact from restricted access to sea areas</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.
MOR_131_006_270523	<p>1.8 Shipping and Navigation</p> <p>Adverse impact from restrictions of shipping lanes leading to reduced reliability and increased cost of connections, with knock-on impacts of increased economic costs, notably in food, and reduced tourism</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_131_007_270523	<p>1.11 Infrastructure and Other Users</p> <p>No listed connection for feeding generated power to the Isle of Man</p>	The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.
MOR_131_008_270523	<p>1.14 Socioeconomics, Tourism and Recreation</p> <p>Higher costs and inconvenience for Isle of Man residents, adverse impact on tourism. Possible adverse impact on shipping to and from Northern Ireland</p>	Consideration of potential effects to the economy is presented in Chapter 20 Socio-economics, Tourism and Recreation (Document Reference 5.1.20).

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_131_009_270523	1.15 Climate Change Clean energy should be a positive impact	The Applicant notes your response

Unique Reference Identifier	Consultation response received	Applicant response
MOR_132_001_280523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>We wish to express our deep concern that the proposed wind farm project extends into the Isle of Man Steam Packet's sea routes, both to Heysham and to Liverpool, and even more so will have a significant impact on alternative routes taken to and from both of these ports in rough weather. As you are aware, the Isle of Man Steam Packet operates 2 return crossings every day of the year apart from Christmas day. If the location of the windfarms goes ahead as planned, this will seriously disrupt the business of the Steam Packet, and cause serious impact to the economy of the Isle of Man. This needs to be taken into consideration, and the size of the windfarm amended accordingly. This applies particularly to the Morgan and Mona proposals.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_132_002_280523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>We wish to express our deep concern that the proposed wind farm projects extend into the Isle of Man Steam Packet's sea routes, both to Heysham and to Liverpool, and even more so will have a significant impact on alternative routes taken to and from both of these ports in rough weather. As you are aware, the Isle of Man Steam Packet operates 2 return crossings every day of the year apart from Christmas day. If the location of the windfarms goes ahead as planned, this will seriously disrupt the business of the Steam Packet, and cause serious impact to the economy of the Isle of Man, to the wellbeing of the Island's residents, and to the business of the Steam Packet. This needs to be</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>taken into consideration, and the size and location of the windfarms called Morgan & Mona amended accordingly.</p>	<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
<p>MOR_132_003_280523</p>	<p>Q6 Do you have any comments on anything else within this consultation? We wish to express our deep concern that the proposed wind farm projects extend into the Isle of Man Steam Packet's sea routes, both to Heysham and to Liverpool, and even more so will have a significant impact on alternative routes taken to and from both of these ports in rough weather. As you are aware, the Isle of Man Steam Packet operates 2 return crossings every day of the year apart from Christmas day. If the location of the windfarms goes ahead as planned, this will seriously disrupt the business of the Steam Packet, and cause serious impact to the economy of the Isle of Man, to the wellbeing of the Island's residents, and to the business of the Steam Packet. This needs to be taken into consideration, and the size and location of the windfarms called Morgan & Mona amended accordingly.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_132_004_280523	<p>1.8 Shipping and Navigation</p> <p>We wish to express our deep concern that the proposed wind farm projects extend into the Isle of Man Steam Packet's sea routes, both to Heysham and to Liverpool, and even more so will have a significant impact on alternative routes taken to and from both of these ports in rough weather. As you are aware, the Isle of Man Steam Packet operates 2 return crossings every day of the year apart from Christmas day. If the location of the windfarms goes ahead as planned, this will seriously disrupt the business of the Steam Packet, and cause serious impact to the economy of the Isle of Man, to the wellbeing of the Island's residents, and to the business of the Steam Packet. This needs to be taken into consideration, and the size and location of the windfarms called Morgan & Mona amended accordingly.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_132_005_280523	<p>1.16 Traffic and Transport</p> <p>We wish to express our deep concern that the proposed wind farm projects extend into the Isle of Man Steam Packet's sea routes, both to Heysham and to Liverpool, and even more so will have a significant impact on alternative routes taken to and from both of these ports in rough weather. As you are aware, the Isle of Man Steam Packet operates 2 return crossings every day of the year apart from Christmas day. If the location of the windfarms goes ahead as planned, this will seriously disrupt the business of the Steam Packet, and cause serious impact to the economy of the Isle of Man, to the wellbeing of the Island's residents, and to the business of the Steam Packet. This needs to be taken into consideration, and the size and location of the windfarms called Morgan & Mona amended accordingly.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_133_001_280523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>The issue of climate change is the defining problem of our generation, and all sources of available renewable energy should be deployed, in the right places, without further delay</p>	The Applicant notes your response.
MOR_133_002_280523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>See previous answers.</p>	The Applicant notes your response.
MOR_134_001_280523	<p>Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>No</p>	The Applicant notes your response.
MOR_134_002_280523	<p>1.1: Marine Geology, Oceanography and Physical Processes: How will this be monitored over the period of development.</p>	Monitoring requirements have been established as part of the Project's EIA and are outlined in each chapter of the Environmental Statement, as well as within the In Principal Monitoring Plan (Document Reference 6.4).
MOR_134_003_280523	<p>1.2: Marine Sediment and Water Quality: How will this be monitored over the period of development.</p>	Monitoring requirements have been established as part of the Project's EIA and are outlined in each chapter of the Environmental Statement, as well as within the In Principal Monitoring Plan (Document Reference 6.4).
MOR_134_004_280523	<p>1.4: Fish and Shellfish Ecology: What effect will there be on the Queenies season?</p>	Consideration of potential effects is presented in Chapter 13 Commercial Fisheries (Document Reference 5.1.13).
MOR_134_005_280523	<p>1.5: Marine Mammals: We are now seeing different types of marine mammals after some period of time. Will information and results be available after 24 months survey.</p>	The Applicant can confirm 24 months of survey data is presented in Chapter 11 Marine Mammals (Document Reference 5.1.11).

Unique Reference Identifier	Consultation response received	Applicant response
MOR_134_006_280523	1.6: Offshore Ornithology: Will you be reporting back to the public following the further 12 months of surveys.	The Applicant can confirm 24 months of survey data is presented in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).
MOR_134_007_280523	1.7: Commercial Fisheries: Confirmation of assessment of effects as work goes on.	Consideration of potential impacts and mitigation is presented in Chapter 13 Commercial Fisheries (Document Reference 5.1.13) and the In Principle Monitoring Plan (Document Reference 6.4).
MOR_134_008_280523	1.8: Shipping and Navigation: How would Liverpool - Douglas ferry be affected. Would there be longer sailings necessary.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_134_009_280523	1.12: Seascape, Landscape and Visual Impact Assessment (SLVIA): The view from Maughold Head and the East Coast will be affected. Now there is a clear view across to the UK.	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_134_010_280523	1.13: Human Health: Will you inform the public when decisions are made on the ports - 1 - 115	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection and heliport selection will be made post consent. We will continue to engage with Spirit Energy as further details are defined.</p> <p>The Applicant will announce the selection of the port closer to the time, as appropriate.</p>
MOR_134_011_280523	1.14: Socioeconomics, Tourism and Recreation: Use of local manpower is vital in all situations.	<p>The Applicant has submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11).</p> <p>Given the size and scale of the Project, we recognise this plan will need to deliver benefits for the Local Economic Area. Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Applicant will also seek to maximise the local benefits where possible associated with the development construction, operations and maintenance, and decommissioning phases of the Project through its procurement and supply chain process.</p>
MOR_134_012_280523	1.15: Climate change: Climate change is affecting the IoM and more boats have had to be cancelled this year! Our lifeline may be affected more during the term of the project.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p> <p>Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.</p>
MOR_134_013_280523	1.16: Traffic and Transport: Should be looked at carefully as to effect this may have on the Isle of Man.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_134_014_280523	<p>Q2: Do you have any comments on our work to understand the technical and environmental constraints of the areas offered to us by the Crown Estate as part of its Round 4 leasing process?</p> <p>No</p>	<p>The Applicant notes your response.</p>
MOR_134_015_280523	<p>Q3: Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>One would hope more jobs would be created both onshore and off. These opportunities should be offered to local residents.</p>	<p>The Applicant has also submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11).</p> <p>Given the size and scale of the Project, we recognise this plan will need to deliver benefits for the Local Economic Area. Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Applicant will also seek to maximise the local benefits where possible associated with the development construction, operations and maintenance, and decommissioning phases of the Project through its procurement and supply chain process.</p>
MOR_134_016_280523	<p>Q4: Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm?</p> <p>No</p>	<p>The Applicant notes your response.</p>
MOR_134_017_280523	<p>Q5: Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes etc.</p> <p>Concerned about the steam packet company having to detour possibly during different weather conditions. Your generation assets brochure page 19 shows the "mitigation have been identified to reduce effects further". How will these be judged and when.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).
MOR_134_018_280523	Q6: Do you have any comments on anything else within this consultation. No	The Applicant notes your response.
MOR_135_001_280523	Theme 2: Landscape and visual impact Wholly supportive. Please do more of this. And lift the onshore wind farm ban, it is ridiculous.	The Applicant notes your response.
MOR_135_002_280523	Theme 3: Local heritage and archaeology Wholly supportive. Please do more of this. And lift the onshore wind farm ban, it is ridiculous.	The Applicant notes your response.
MOR_136_001_280523	Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)? "I am an Isle of Man resident. I am opposed to this development because it will disrupt the Isle of Man Steam packet routes. While in good weather, there is a possibility of passing through this area, when the weather is rougher and the ships need to adjust their navigation, the windfarms will be an obstruction. I do not want to see our shipping lanes made dangerous by this development. I am concerned with the windmills themselves because it has not been demonstrated that these large structures, which have a short lifespan, can be disposed of in an environmentally suitable way, i.e. I don't believe they are biodegradable."	The Decommissioning Plan for the Project would be submitted to the Secretary of State for approval closer to the time and will take account of relevant circumstances and potential mitigation measures towards the end of the lifetime of the Project. Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2). Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km ² to 87km ² . The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation. A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the

Unique Reference Identifier	Consultation response received	Applicant response
		<p>hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.</p>
MOR_136_002_280523	<p>Q2 Do you have any comments on our work to understand the technical and environmental constraints of the areas offered to us by the Crown Estate as part of its round 4 leasing process?</p> <p>No comments</p>	<p>The Applicant notes your response.</p>
MOR_136_003_280523	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>This project would have no benefit to the Isle of Man, but possible negative impact.</p>	<p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_136_004_280523	<p>Q4 Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm?</p> <p>No comments</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_136_005_280523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>It would obstruct our main trading links with England.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_136_006_280523	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>No further comments</p>	<p>The Applicant notes your response.</p>
MOR_136_007_280523	<p>1.8 Shipping and Navigation</p> <p>As above, I am concerned over the disruption and danger this project would cause to the Isle of Man Steam Packet's routes.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_137_001_290523	<p>Theme 2: Landscape and visual impact Any windfarm between the Isle of Man and England must not obstruct the safe passage of vessels between the two landmasses and take into account the various routes which are required to be taken due to weather conditions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_138_001_290523	<p>Theme 2: Landscape and visual impact</p> <p>The location of this windfarms is directly in the path of established shipping routes. Constructing it will endanger the lives of merchant seamen and passengers in passenger carrying vessels. It is totally and utterly unacceptable to construct these farms in the Irish Sea in the proposed locations.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_139_001_290523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>While being supportive of the need to reduce or eliminate the use of fossil fuels for energy, this cannot be allowed to seriously impact the future of the Isle of Man and its people. The application of more intelligent and careful planning of windfarms in the Irish Sea will provide for the achievement of the goal of introducing more wind power without endangering our community.</p> <p>This statement below from the Isle of Man Steam Packet Company reflects my views on this issue:-</p> <p>'KEY CONCERNS</p> <p>The safety of navigation for ships when sailing through the wind farm corridors.</p> <p>The lack of open sea room for navigating in rough weather is likely to increase the risk of cancellations on the islands lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods.</p> <p>The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions.'</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_139_002_290523	<p>1.8 Shipping and Navigation See above</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_140_001_300523	<p>Q4 Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm? The safety of navigation for ships when sailing through the wind farm corridors. The lack of open sea room for navigating in rough weather is likely to increase risk of cancellations on the island lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods. The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_140_002_300523	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>The safety of navigation for ships when sailing through the wind farm corridors.</p> <p>The lack of open sea room for navigating in rough weather is likely to increase risk of cancellations on the island's lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods.</p> <p>The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_140_003_300523	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>The safety of navigation for ships when sailing through the wind farm corridors.</p> <p>The lack of open sea room for navigating in rough weather is likely to increase risk of cancellations on the island's lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods.</p> <p>The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_140_004_300523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>The safety of navigation for ships when sailing through the wind farm corridors.</p> <p>The lack of open sea room for navigating in rough weather is likely to increase risk of cancellations on the island's lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods.</p> <p>The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_141_001_010623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>It is the second try to impose the project on the residents of the Isle of Man. The lives of us will be tremendously affected but it seems to me nobody thinks about it. The trips from / to Heysham from / to Douglas will be longer and costly, the weather conditions in the Irish Sea are changing very rapidly, which means sometimes we won't have our food delivered on time.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_141_002_010623	<p>Q2 Do you have any comments on our work to understand the technical and environmental constraints of the areas offered to us by the Crown Estate as part of its round 4 leasing process?</p> <p>The project does not take into account real people, who will be negatively affected directly by it.</p>	<p>The Applicant has also submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11).</p> <p>Given the size and scale of the Project, we recognise this plan will need to deliver benefits for the Local Economic Area. Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The Applicant will also seek to maximise the local benefits where possible associated with the development construction, operations and maintenance, and decommissioning phases of the Project through its procurement and supply chain process.</p>
MOR_141_003_010623	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>The problem is that nobody seems to understand how it will destroy the lives of the Manx residents and their relatives in the UK.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts to the Isle of Man have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>
MOR_141_004_010623	<p>Q4 Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm?</p> <p>The whole project must be abandoned for the reasons mentioned above.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts to the Isle of Man have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>
MOR_141_005_010623	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>It will not work and destroy the whole industries.</p>	<p>The Applicant recognises the need to co-exist with other industries in the area. Disruption of ferry operations and potential impacts have been considered cumulatively in the Chapter 14 Shipping and Navigation (Document Reference 5.1.14), Chapter 13 Commercial Fisheries (Document Reference 5.1.13 and Chapter 17 Infrastructure and Other Users (Document Reference 5.1.17).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_141_006_010623	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>The consultation should be abandoned because it will damage the lives of Manx residents.</p>	<p>Statutory consultation is a key part of the planning and DCO application process. The Applicant takes consultation and engagement seriously to understand the views from stakeholders and communities.</p> <p>If the DCO application is accepted, a pre-examination stage will begin, with opportunities for local community members to register as an interested party on the Planning Inspectorate’s website and request to take part in the examination process. The Planning Inspectorate will then examine the DCO application, with input from interested parties and statutory consultees. The examination period is expected to be a maximum of six months. Following the examination, the Planning Inspectorate will present its recommendation to the Secretary of State for Energy Security and Net Zero, who will then make the final decision on whether the DCO should be granted.</p>
MOR_141_007_010623	<p>1.1 Marine Geology, Oceanography and Physical Processes</p> <p>All above will be affected.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Our assessments and proposed mitigation on marine geology oceanography and physical process are presented in Chapter 7 Marine Geology, Oceanography and Physical Process (Document Reference 5.1.7).</p>
MOR_141_008_010623	<p>1.2 Marine Sediment and Water Quality Again, all above will be affected.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p> <p>Our assessments and proposed mitigation on marine sediment and water quality are presented in Chapter 8 Marine Sediment and Water Quality (Document Reference 5.1.8).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_141_009_010623	1.3 Benthic Ecology It will be affected.	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p> <p>Our assessments and proposed mitigation on benthic ecology are presented in Chapter 9 Benthic Ecology (Document Reference 5.1.9).</p>
MOR_141_010_010623	1.4 Fish and Shellfish Ecology It will be destroyed.	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p> <p>Our assessments and proposed mitigation on fish and shellfish are presented in Chapter 10 Fish and Shellfish Ecology (Document Reference 5.1.10).</p>
MOR_141_011_010623	1.5 Marine Mammals Their lives will be negatively affected.	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p> <p>Our assessments and proposed mitigation on marine mammals are presented in Chapter 11 Marine Mammals (Document Reference 5.1.11).</p>
MOR_141_012_010623	1.6 Offshore Ornithology Probably will be completely destroyed.	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p> <p>Our assessments and proposed mitigation for offshore ornithology are presented in Chapter 12 Offshore Ornithology (Document Reference 5.1.12).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_141_013_010623	1.7 Commercial Fisheries Will be badly affected.	<p>Commercial fishing activity has been characterised using landings statistics, publicly available vessel data, and engagement with the fishing industry.</p> <p>Based on an analysis of the location of the Project, fishing activity is expected to be dominated by larger vessels potting for whelk, and to a lesser extent dredging for scallops. With additional mitigation for the construction period, Project effects have been assessed as minor.</p> <p>The Applicant confirms that a Fishing Liaison Officer (FLO) for the Project is in place to maintain regular communication with the local fishery associations. This is presented in the Outline Fisheries Liaison and Coexistence Plan (Document Reference 6.3) which has been included within the DCO application. The plan also refers to the process for justifiable evidence-based disturbance payments.</p>
MOR_141_014_010623	1.8 Shipping and Navigation Affected to such an extent that will destroy and hugely disrupt our connection with the UK.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_141_015_010623	1.9 Marine Archaeology and Cultural Heritage It will be damaged and destroyed.	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate. Our assessments and potential mitigation on Marine Archaeology and Cultural Heritage are presented in Chapter 15 Marine Archaeology and Cultural Heritage (Document Reference 5.1.15).</p>
MOR_141_016_010623	1.10 Civil and Military Aviation and Radar Affected badly.	Assessments and potential mitigations are presented in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).
MOR_141_017_010623	1.11 Infrastructure and Other Users Badly affected and will be very complicated.	In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The environmental assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p> <p>Our assessments and proposed mitigation on infrastructure and other users are presented in Chapter 17 Infrastructure and Other Users (Document Reference 5.1.15).</p>
MOR_141_018_010623	1.12 Seascape, Landscape and Visual Impact Assessment (SLVIA) Affected badly.	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_141_019_010623	<p>1.13 Human Health Travell fro the UK to the Isle of man will be more expensive and longer which will have a knock effect on the mental and physical health.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Our assessments and proposed mitigation on human health are presented in Chapter 19 Human Health (Document Reference 5.1.19).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_141_020_010623	1.14 Socioeconomics, Tourism and Recreation Will be damaged in the Isle of Man.	<p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_141_021_010623	1.15 Climate Change This project will affect the lives of the whole population of the IOM and their UK relatives.	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts to the Isle of Man have also been considered cumulatively in the Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_142_001_010623	<p>Theme 2: Landscape and visual impact</p> <p>I approve of more wind farms. Why is this one called Morecambe when it is directly offshore from Blackpool, which would be a much more logical and truthful name.</p>	<p>The Applicant notes your response. The name of the Project was chosen as the Project falls within the Morecambe Bay area.</p>
MOR_143_001_010623	<p>Theme 2: Landscape and visual impact</p> <p>I think this is a great idea. Provided it won't adversely impact the environment, birds, fish etc.</p>	<p>The Applicant notes your response. In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys, such as benthic ecology, marine mammals and offshore ornithology, to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_144_001_010623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>The turbines are still too close to shore and are visible from Morecambe. There are already hundreds of these turbines that can be seen from here. Any more is over-kill and will detract the area from it's natural beauty.</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_144_002_010623	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>I believe this will have a negative effect on local tourism due to the visual impact on yhe area.</p>	<p>To understand potential impacts to tourism, the Applicant drew the assessment on a range of publicly available statistics for the local study area as well as the UK as a whole.</p> <p>The tourism economy across the Local Economic Area is varied with multiple markets and assets which attract visitors. The overall assessment found the Project is expected to have no significant effects on the tourism economy and recreational activities.</p> <p>Further information on our assessments can be found in Chapter 20: Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20) and Chapter Seascape, Landscape and Visual Impact Assessment (Document Reference 5.1.18).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_144_003_010623	<p>1.6 Offshore Ornithology</p> <p>Morecambe Bay is renowned for its bird areas and wildlife. Too many of these turbines concentrated in the same area will have an effect on the wildlife</p> <p>Where will the electrical lines come ashore and how can it be guaranteed that wildlife will not be effected</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicant’s Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources. Project specific surveys – including two years of aerial survey data for ornithology and marine mammals – were used to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation that could be embedded into project design for any significant impacts.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated where appropriate and included in the respective chapters of the Environmental Statement.</p> <p>The assessments considered disturbance and displacement, collision risk and indirect effects on habitats, prey species.</p> <p>No significant adverse effects were identified for the Project alone, including risk of bird collisions with wind turbine generators, which was assessed as no greater than minor, and not significant for the Project alone for all species recorded in flight at the Project’s windfarm site.</p> <p>Further information on our assessments can be found in Chapter 12: Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p> <p>In terms of where the electrical lines come ashore, this forms part of the Morgan and Morecambe Offshore Wind Farms: Transmission Assets which is subject to a separate DCO application. Further information can be found on their website at www.morecambeandmorgan.com/transmission.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_144_004_010623	1.11 Infrastructure and Other Users Where will the electricity come ashore?	As the Project is completely offshore, the Applicant believe this feedback is associated with the Morgan and Morecambe Offshore Wind Farms: Transmission Assets which is subject to a separate DCO application. Further information can be found on their website at www.morecambeandmorgan.com/transmission .
MOR_144_005_010623	1.12 Seascape, Landscape and Visual Impact Assessment (SLVIA) The turbines are still too close to shore and are visible from Morecambe . There are already hundreds of these turbines that can be seen from here. Any more is over-kill and will detract the area from it's natural beauty	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_145_001_010623	<p>Theme 2: Landscape and visual impact</p> <p>I,m writing to express my support for the proposed wind farm. It will help the UK achieve its net zero legal commitments and displace gas / coal generation. Im familiar with the offshore wind farms that can be seen from the Wirral & northern Merseyside and the do not think it has any impact on the natural beauty of the coastline, in fact seeing a windfarm make me happy as I know harnessing electricity from wind is the right thing to do.</p>	The Applicant notes your response.
MOR_146_001_010623	<p>I want to register my support for this new wind farm. Clean, no carbon dioxide, non nuclear power generation must be an industry which the UK can excel at and make a significant contribution to limiting global warming. The power transmission infrastructure which exists for Heysham nuclear power stations must make the bottleneck which exists for other schemes minimal. I know aesthetics, fishing, Navigation and disturbance of the sea bed causing risk to the natural habitat must be addressed but should not delay the proposed scheme more than a bit. I hope that the scheme can provide steady employment and other economic benefits.</p>	The Applicant notes your response.
MOR_147_001_010623	<p>A little while ago the vast wind farm around Barrow in Furness was built. I'd walk down to Sandylands prom watching it being constructed.</p> <p>I my opinion it looks great besides providing power that is required now.</p> <p>The idea of a wind farm in Morecambe Bay is a plus. It gets very very windy at times. What a waste of a natural occurring event.</p> <p>I am wholeheartedly in favour of the wind farm</p>	The Applicant notes your response.
MOR_148_001_010623	<p>We hope you get the go-ahead for this. It seems an ideal spot. We often come along here to walk; it is bleak and bare and quiet - just perfect for a dog walk. Wind turbines will enhance it. Far better to put them here than on a busy coast that is used for beach and water activities.</p>	The Applicant notes your response.
MOR_149_001_010623	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>I am in favour of this project.</p>	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
MOR_150_001_020623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Morecambe Bay is an important site for nesting and migrating sea birds. There are enough turbines in the bay now and more are not appropriate in this important world-renowned wildlife site. Fleetwood has a beautiful view of the bay and is a struggling Victorian seaside resort. Industry and fishing have gone from the area and it needs help to build its tourist industry not hindrance and ugliness.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources. Project specific surveys, including two years of aerial survey data for ornithology and marine mammals, were used to understand the potential impacts during the construction, operation and maintenance, and decommissioning, phases of the Project, and identify appropriate mitigation that could be embedded into project design for any significant impacts.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated where appropriate and included in the respective chapters of the Environmental Statement.</p> <p>The assessments considered disturbance and displacement, collision risk and indirect effects on habitats, prey species.</p> <p>No significant adverse effects were identified for the Project alone, including risk of bird collisions with wind turbine generators, which was assessed as no greater than minor, and not significant for the Project alone for all species recorded in flight at the Project's windfarm site.</p> <p>To reduce the risk of bird collision, the Project has increased the air gap from 22m to 25m above Highest Astronomical Tide (HAT). Further information on our assessments can be found in Chapter 12: Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p> <p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p> <p>Commercial fishing activity has been characterised using landings statistics, publicly available vessel data, and engagement with the fishing industry.</p> <p>Based on an analysis of the location of the Project, fishing activity is expected to be dominated by larger vessels potting for whelk, and to a lesser extent dredging for scallops. With additional mitigation for the construction period, Project effects have been assessed as minor.</p> <p>The Applicant confirms that a Fishing Liaison Officer (FLO) for the Project is in place to maintain regular communication with the local fishery associations. This is presented in the Outline Fisheries Liaison and Coexistence Plan (Document Reference 6.3) which has been included within the DCO application. The plan also refers to the process for justifiable evidence-based disturbance payments.</p> <p>Further information on our assessments can be found in Chapter 13: Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13).</p>
MOR_150_002_020623	<p>1.6 Offshore Ornithology</p> <p>Morecambe Bay is an important site for nesting and migrating sea birds. There are enough turbines in the bay now and more are not appropriate in this important world-renowned wildlife site. Fleetwood has a beautiful view of the</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>bay and is a struggling Victorian seaside resort. Industry and fishing have gone from the area and it needs help to build its tourist industry not hindrance and ugliness.</p>	<p>on the environment.</p> <p>The environmental assessments were undertaken using a wide range of data sources. Project specific surveys – including two years of aerial survey data for ornithology and marine mammals – were used to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation that could be embedded into project design for any significant impacts.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated where appropriate and included in the respective chapters of the Environmental Statement.</p> <p>The assessments considered disturbance and displacement, collision risk and indirect effects on habitats, prey species.</p> <p>No significant adverse effects were identified for the Project alone, including risk of bird collisions with wind turbine generators, which was assessed as no greater than minor, and not significant for the Project alone for all species recorded in flight at the Project’s windfarm site.</p> <p>Further information on our assessments can be found in Chapter 12: Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p>
MOR_151_001_020623	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc. Need to consider shipping corridors.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_151_002_020623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)? Consideration needs to be given to bad weather corridors for Isle of Man Steam Packet</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_153_001_020623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>I object to the siting of the Wind Farm. It is likely to effect the sailing route of the Steam Packet, which will increase journey time and use more fuel, this is not 'green'.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km2 to 87km2 to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_153_002_020623	<p>Q5 Do you have any comments on how our project interacts with other marine users? For example, commercial fisheries, ferry routes, etc.</p> <p>I object to the siting of the Wind Farm. It is likely to effect the sailing route of the Steam Packet, which will increase journey time and use more fuel, this is not 'green'.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km2 to 87km2 to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_153_003_020623	<p>1.8 Shipping and Navigation I object to the siting of the Wind Farm. It is likely to effect the sailing route of the Steam Packet, which will increase journey time and use more fuel, this is not 'green'.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km² to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_154_001_020623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)? I approve of the plans to install wind turbines in the Bay, with disturbance to wildlife kept to an absolute minimum whilst work is completed. I support this green energy project.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_155_001_020623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Please see below but believe windfalls aren't efficient enough to be worthwhile</p>	<p>Generation of energy from renewable sources has been recognised by the UK government as fundamental to UK energy policy and development of a low-carbon economy. The Clean Growth Strategy (Department for Business, Energy and Industrial Strategy (BEIS), 2017) outlined the UK government's goals to develop industries which are key to economic development, whilst simultaneously reducing the emission of greenhouse gases (GHG), offshore wind is recognised as having a beneficial impact towards both goals. This contributed to the commitment within the Sector Deal (HM Government, 2019) to increase offshore wind capacity.</p> <p>Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions, Chapter 2 Need for the Project (Document Reference 5.1.2) and Planning Development Consent and Need Statement (Document Reference 4.8).</p>
MOR_155_002_020623	<p>1.8 Shipping and Navigation</p> <p>At no point should any of the Isle of Man ships going to and from the mainland be hindered, such as change of route or extra time taken to travel by ship, as it is such a vital lifeline, and also already expensive, to travel on and receiving supplies such as food as prices are already higher than UK and in case of fruit and veg a day older at least before we get them.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_156_001_020623	<p>The Cumbria Local Enterprise Partnership (CLEP) is Government’s endorsed economic and business body for Cumbria, focused on strategy, investment, advocacy and co-ordination. The LEP has three strategic touchstones to guide its activity – productivity, inclusive growth and net zero, with its commitment to the latter being delivered through the twin priorities of clean energy generation and business decarbonisation. It is in this context, and with the support of our Clean Energy Sector Panel, that CLEP is submitting this response.</p> <p>The Morgan development will be sited south of our coast and close to Barrow, which has already grown to be the operational hub for a number of offshore wind developments in the area. It is also an area that is central to CLEP’s economic growth ambitions given the scale of opportunity in Barrow from the significant increase in BAE Submarine’s activities and the creation of a Green Hub with Spirit Energy’s proposed 1 Gigaton carbon storage facility and Carlton Power and Kimberley Clark’s hydrogen proposal.</p> <p>CLEP published a Clean Energy Strategy in 2022 that made clear the importance of offshore wind to deliver clean energy for the UK and that our ports could play a key role in support to both construction and operations as well as the wider supply chain potential in Cumbria.</p> <p>https://www.thecumbrialep.co.uk/resources/uploads/pages/net_zero/2208-CumbriaCleanEnergyStrategy.pdf</p> <p>Our strategy refers to the new developments of Mona, Morgan and Morecambe that would substantially increase the offshore generation capacity in the East Irish Sea. We have welcomed the early engagement with the Morecambe Project team and would welcome this to be continued as the project progresses.</p> <p>CLEP strongly support the proposed development as a substantial contribution to the UK national target of 30GW of clean offshore energy by 2030 and as a spur for economic growth in Cumbria and the wider northwest region.</p>	<p>The Applicant notes your response.</p> <p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection will be made post consent. We will continue to engage with Spirit Energy as further details are defined.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>The summary of the Preliminary Environmental Impact Statement appears to be comprehensive and concur that there are no obvious significant adverse effects when balanced against the net zero energy benefit. However, we are not environmental experts and welcome the wider feedback on the specific environmental areas identified in the assessment from Subject Matter Experts.</p> <p>We welcome the obvious collaboration with the Morecambe Project that bodes well for the concurrent delivery of both developments in the region.</p> <p>Our comments are limited to the generation assets consultation. We note the transmission assets consultation and intention for the grid connection in Penwortham, Lancashire and have no comments on this aspect.</p> <p>In summary, CLEP are supportive of all of the Morgan, Mona and Morecambe developments as significant contributions to the UK clean energy generation capacity and for economic development in Cumbria and the north-west region. We look forward to future engagement with the project team particularly in seeking opportunities for Cumbria businesses in Construction and for the longer-term O&M phase to build on the growing skills and capability in the Barrow area.</p>	
MOR_157_001_020623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Please I ask you not to build the electricity storage on the proposed sites opposite school Lane + surrounding areas. It has taken us a lifetime to pay off our morgage and the value will plunit if plans go ahead. Who will compensate us? We have used the bridal path on the bottom of Thames Street which is one of the only safe carless places to ride, this will also be lost. This area is haven for wildlife and farming. It's beautiful don't take this away from the residents.</p>	<p>As the Project is completely offshore, we believe this feedback is associated with the Morgan and Morecambe Offshore Wind Farms: Transmission Assets. The Applicant has no further comment.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_157_002_020623	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>Please don't turn our village into a blot on the landscape. I understand the need for renewable energy but this is not the correct site at Newton. The impact on the surrounding area, I am devastated to see just what the site will look like and it's effect on the area. I know that nobody wants this change of landscape in their area but Newton is not the correct place. Children, residents, farming will all suffer if your plans go ahead. Please, please consider other areas....</p>	
MOR_158_001_020623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Build the windfarm! This country desperately needs investment in its energy security, and offshore wind is a brilliant was to consolidate our supply.</p>	The Applicant notes your response.
MOR_159_001_020623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>the owners of these windfarm, in applying for and building them area that they are liable for any damage caused to there stuff by low flying aircraft and are liable for any damage caused to low flying aircraft. they also will ensure that there stuff does not effect or interfere with any radars or transmitter around the irish sea.</p>	<p>The Applicant is in engagement with various airports.</p> <p>A detailed technical safeguarding analysis of Instrument Flight Procedures (IFP) and Radar Line of Sight has been undertaken, and mitigation has been identified, as appropriate.</p> <p>Further information on our assessments can be found in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).</p>
MOR_159_002_020623	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>people from the north west of the uk should build, maintain and operate these turbines. you should use local people to do the work.</p>	<p>The Applicant notes the comments in relation to job creation and would like to draw attention to Chapter 20: Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20), which outlines the potential economic benefits including job creation of the Project.</p> <p>The Applicant has also submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11).</p> <p>Given the size and scale of the Project, we recognise this plan will need to deliver benefits for the Local Economic Area. Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Alongside energy supply security, offshore wind projects bring significant benefits to their local communities, and the Applicant believes it is important that the local supply chain contributes to this too.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_159_003_020623	Q4 Do you have any comments on how we are proposing to construct Morecambe Offshore Windfarm? and you shall not damage the sea floor away from the locality of each pillar supporting a turbine.	Consideration of direct effects to the seabed is presented in Chapter 7 Marine Geology Oceanography and Physical Processes (Document Reference 5.1.7), Chapter 8 Marine Sediment (Document Reference 5.1.8) and Chapter 9 Benthic Ecology (Document Reference 5.1.9).
MOR_159_004_020623	Q6 Do you have any comments on anything else within this consultation? All the infrastructure shall be 100% remove from the seabed and the land when the windfarm reaches end of life and everything shall be recycled.	The Decommissioning Plan for the Project would be submitted to the Secretary of State for approval closer to the time and will take account of relevant circumstances and potential mitigation measures towards the end of the lifetime of the Project. Major infrastructure is expected to be removed and a strategy for repurposing the materials would be developed based on the latest technology available then.
MOR_159_005_020623	1.9 Marine Archaeology and Cultural Heritage please do not coat the underwater parts in chemicals that stop marine life from growing.	The Applicant notes your response.
MOR_159_006_020623	1.10 Civil and Military Aviation and Radar the owners of the wind farms also will ensure that there stuff does not effect or interfere with any radars or transmitter around and above the irish sea.	<p>The Applicant is in engagement with various airports.</p> <p>A detailed technical safeguarding analysis of Instrument Flight Procedures (IFP) and Radar Line of Sight has been undertaken, and mitigation has been identified, as appropriate.</p> <p>Further information on our assessments can be found in Chapter 16 Civil and Military Aviation and Radar of the Environmental Statement (Document Reference 5.1.16).</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_159_007_020623	<p>1.12 Seascape, Landscape and Visual Impact Assessment (SLVIA) they look horrible</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_160_001_020623	<p>The below relates to all items under consultation.</p> <p>I am a resident of the Isle of Man and considering the proposed locations of the new Generation Assets, I hereby express great concern to the Isle of Man's lifeline represented by the ferry link from Douglas to the ports at Liverpool and Heysham. Any route which is not direct will add time and therefore cost to this journey. As a result, the cost of living on the Island will most certainly increase.</p> <p>Any additional costs to the transport of goods will result in an increase in the costs of goods and services on the Island.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>All the above highlight the detrimental effects of the offshore wind project generation assets and offshore windfarm generation assets to the people of the Isle of Man. If you can give assurances that the shipping routes will not be affected, including both calm and rough weather routes, then I would be in favour of this development; if not, then I would be vehemently opposed to it.</p>	<p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_160_002_020623	<p>Travelling on holiday and for business will become more difficult, not only for residents, but also for potential visitors and prospective immigrants, making the Island a less attractive option. It is these last two groups which are vital for the long-term success and health of the Isle of Man - also according to the mid to long term strategy of the IOM Government.</p> <p>Professionals in all fields will be further put off from moving to the Island, thus adding further to the difficulty in attracting vital health professionals.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_161_001_030623	<p>I am totally opposed to any more wind farms anywhere near Morecambe bay.</p> <p>If anyone has done any actual independent research into them, then they will know that a wind turbine takes far more energy to produce in the first place than they could ever hope to produce in the lifetime of the monstrosity.</p>	<p>Generation of energy from renewable sources has been recognised by the UK government as fundamental to UK energy policy and development of a low-carbon economy. The Clean Growth Strategy (Department for Business, Energy and Industrial Strategy (BEIS), 2017) outlined the UK government’s goals to develop industries which are key to economic development, whilst simultaneously reducing the emission of greenhouse gases (GHG), offshore wind is recognised as having a beneficial impact towards both goals. This contributed to the commitment within the Sector Deal (HM Government, 2019) to increase offshore wind capacity.</p> <p>By 2030 the aim is to produce 40GW of offshore wind (a target increased to 50GW of offshore wind generated electricity in the British Energy Security Strategy (BESS), 2022). This ambitious net zero target will only be met by the crucial contribution from the offshore wind industry and is a substantial increase from the 14GW of offshore windfarms either fully commissioned or under construction, as of March 2021 (Gray, 2021).</p> <p>Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions, Planning Development Consent and Need Statement (Document Reference 4.8), Chapter 2 Need for the Project (Document Reference 5.1.2) and Planning Development Consent and Need Statement (Document Reference 4.8).</p>
MOR_161_002_030623	<p>They are a complete eyesore and have already destroyed many of the areas of outstanding natural beauty both around this area and the country in general.</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project’s windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_161_003_030623	<p>Regardless of what your laughable consultation Document says, there is a significant PERMANENT impact on all forms of wildlife, be it marine, land or air. They are basically a huge waste of money and resources and the only benefits are to the bank balances of those involved.</p> <p>In conclusion, I do not for one second expect my or anyone else's opinion to be taken into account as I have no doubt whatsoever that the decision has already been made.</p>	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicants Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapter of the Environmental Statement.</p> <p>Impacts to marine ecology receptors and human receptors have been fully assessed for all phases of the project, based on a maximum design scenario approach. The Applicant has engaged with key stakeholders to ensure all appropriate and available data has been included and based on the best evidence to underpin the assessment of impacts.</p> <p>Most assessments have determined that there will be no significant effects from the Project. Where a significant effect has been identified, the Applicant has set out appropriate mitigation within the DCO Application. Embedded mitigation is presented in the respective chapters of the Environmental Statement. Detailed mitigation will be determined post consent once the Project parameters are fully refined and finalised. The Applicant will continue to consult with key stakeholders to ensure the mitigation approach is appropriate.</p> <p>Statutory consultation is a key part of the planning and DCO application process. The Applicant takes consultation and engagement seriously to understand the views from stakeholders and communities.</p> <p>If the DCO application is accepted, a pre-examination stage will begin, with opportunities for local community members to register as an interested party on the Planning Inspectorate's</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>website and request to take part in the examination process. The Planning Inspectorate will then examine the DCO application, with input from interested parties and statutory consultees. The examination period is expected to be a maximum of six months. Following the examination, the Planning Inspectorate will present its recommendation to the Secretary of State for Energy Security and Net Zero, who will then make the final decision on whether the DCO should be granted.</p>
MOR_162_001_030623	<p>I have seen and read the various articles on the planned off shore wind farms, I realize that we need our electricity.</p> <p>Our concern (and my husband's as well) is that we need to be absolutely sure that the ferry is never hampered by the presence of the wind farms. The ferry is the Island's lifeline and our connection to our families. It is bad enough when the ferry can't sail because of bad weather!</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_163_001_030623	<p>The Isle of Man Steam Packet Routes for Fair and Foul Weather are not on your Consultation Card.</p> <p>Your proposals are dangerous and ridiculous and give no thought to shipping.</p> <p>To be a passenger at night in a Force 10 it would be frightening, and as Master perhaps more so.</p>	<p>The Applicant has noted the feedback on the consultation post card content. The purpose of the consultation post card was to promote the statutory consultation for the Project and present the locations of the public consultation events. The postcard included a QR code and website details pointing to where more detailed information on the Project could be found.</p> <p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_164_001_030623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>The size of these new farms in addition to the existing farms will endanger shipping routes. This is not just for the Isle of Man ferry routes but also for other shipping in the Irish Sea. It is mandatory that marine navigation in all types of sea should be ensured or the Island will increasingly be cut off in times of bad weather. The islands residents will receive no direct benefits from the farms but WILL be directly affected.</p> <p>I also believe that this website is designed to confuse ordinary contributors and put off from placing their comments.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_165_001_030623	<p>Theme 2: Landscape and visual impact</p> <p>Is there any way the sites can be placed so as to not disrupt the flow of shipping to the Isle of Man? Your sites are liable to cause huge problems for our ability to use a lifeline to our Island</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_166_001_030623	<p>Theme 2: Landscape and visual impact The Isle of Man Steam Packet is vital to residences of the Isle of Man. These wind-farms will have a detrimental impact on the available routes for the vessels. I am against the proposal.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_167_001_040623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>Im just a local resident and havent got a clue about the impact on wildlife or shipping routes, or the suitability of the location in terms of geology or winds. However what I do know is that we need more renewable energy sources, and wherever you build them people will come up with some reason not to - so its a case of balancing needs. We have to build them somewhere and given the existing wind farms in Morecambe Bay, as well as the expertise in the area as part of the energy coast, this seems to make sense to me.</p>	The Applicant notes your response.
MOR_168_001_040623	<p>Q6 Do you have any comments on anything else within this consultation?</p> <p>Do not support.</p>	The Applicant notes your response.
MOR_168_002_040623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>I unreservedly reject this proposal, the seascape is already awash with the large scale windfarm south west views, Heysham and morecambe businesses rely heavily on the visual outlook over the lake district and the sea views across half moon Bay. We have endured the scar of a power plant affecting this and now this on the way to demolition this plan seeks to further damage the ability for this small town and village to truly recognise the benefit of views and harness this for growth of the area. On one hand we look to bring the</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>Eden project to the town to stimulate growth and promote marine life...whilst with the other hand seek to damage the seascape, marine and bird life with further power sea / land grabs</p>	<p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_168_003_040623	<p>1.12 Seascape, Landscape and Visual Impact Assessment (SLVIA) I heavily rely on half moon Bay views to relax and stimulate mental health repair and I believe this will impact on the visual and relaxing ability afforded to me.</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18). Consideration of potential impacts on human health is presented in Chapter 19 Human Health (Document Reference 5.1.19).</p>
MOR_168_004_040623	<p>1.14 Socioeconomics, Tourism and Recreation There is zero benefit to any of these areas by this work...there is however impact as it affects the very views people come here for.</p>	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p> <p>To understand potential impacts to tourism, the Applicant drew the assessment on a range of publicly available statistics for the local study area as well as the UK as a whole.</p> <p>The tourism economy across the Local Economic Area is varied with multiple markets and assets which attract visitors. The overall assessment found the Project is expected to have no significant effects on the tourism economy and recreational activities.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments can be found in Chapter 20: Socio-economics, Tourism and Recreation of the Environmental Statement (Document Reference 5.1.20).</p>
MOR_169_004_040623	<p>I am happy with this location and the concept of using wind power to help power our local homes.</p>	<p>The Applicant notes your response</p>
MOR_170_001_040623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>This project is a terrible idea in its current location. While I am very aware of the benefits of wind farms and fully support them in theory, it seems that no consideration whatsoever has been given to residents of the Isle of Man as this would create a significant barrier to the ability to travel via the Steam Packet and would either limit travel or add significantly to the journey time. This route provides an essential lifeline to the Isle of Man, in terms of travel for residents and freight delivery, so any obstacle or hindrance to this service is completely unacceptable and is, at best, short-sighted, or at worst, showing a complete disregard for the residents of the Isle of Man.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_171_001_040623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>As an IOM resident I am very concerned about the cumulative effects of the Irish Sea wind farms</p>	<p>Consideration of potential effects and proposed mitigation, including cumulative effects with the other Round 4 projects is presented within each of the Environmental Statements (Document 5.1.1 to 5.1.23).</p>
MOR_171_002_040623	<p>They offer no benefits to the IOM, just negatives in terms of visual impact</p>	<p>The Applicant has submitted an Outline Skills and Employment Plan as part of the DCO application (Document Reference 6.11). Further engagement will be undertaken with local and regional partners on the Outline Skills and Employment Plan at the appropriate time to ensure that socio-economic benefits for the Local Economic Area are maximised and aligned as much as possible.</p> <p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant would encourage any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p> <p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p> <p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p>
MOR_171_003_040623	<p>and potential disruption to our shipping routes. This is not only in relation to increased journey times, but the potential for more cancelled sailings - especially during periods of bad weather. The ferries are an essential service for residents and businesses alike. There is currently a proposal to change the postal service from air to sea transportation. If this actually goes ahead, it will make any negative effects on the ferry service considerably worse.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_172_001_040623	<p>Whatever mitigations are proposed, there will undoubtedly be occasions when these will not be adequate in relation to weather conditions. This will result in additional cancellations and delays of ferry sailings, causing disruption to passengers, freight, food supplies, businesses, and tourism possibilities. Also, rerouting of ferries will adversely affect vessels' fuel consumption, and travel time. There would appear to be no consideration as yet for compensation for these eventualities.</p> <p>As the anticipated lifespan of a marine-located wind turbine is only 25 years, we find it somewhat discouraging that you should see fit to entertain such highly disruptive and expensive short-termism. We would like to see you more vigorously pursue the development of other forms of clean energy, for instance geo-thermal, hydrogen, biofuels or tidal.</p> <p>Your listing of effects which should be considered in relation to the project, clearly indicates that you are aware that the overall impact would be negative and that your projected use of a large chunk of the marine environment would cause various forms of disruption, deterioration and disturbance for the sake of supplying power to a relatively small number of UK households for a relatively short time. We find this a disproportionate way of thinking.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Further information on the lifespan of the Project is presented in Chapter 5 Project Description (Document Reference 5.1.5).</p>
MOR_173_001_040623	<p>Further to your invitation of views to this proliferation of wind farm projects, I must inform you that I am in total disagreement with any of these plans.</p> <p>Climate change, as pushed by the mainstream media, is, of course, a hoax with which to upgrade fear in the public domain and brainwash the masses in readiness for a much bigger agenda; as well as distracting them from the main agenda.</p> <p>The earth has had periods of imbalance throughout history, but nature will always correct this of its own accord if left to</p>	<p>Further details are presented in Chapter 2 Need for the Project of the Environmental Statement (Document Reference 5.1.2), Planning Development Consent and Need Statement (Document Reference 4.8) and Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>its own programming.</p> <p>The necessity for a so-called Net Zero is pure invention and in itself a threat to the delicately balanced CO2 level required for life, of which we are demonised on a daily basis. However, if we significantly reduce the CO2 from its current level, nothing will be able to survive - including mankind.</p> <p>But of course there's eye-rolling amounts of money to be made from these projects as the obscenity of greed overtakes many people in another area of our lives; whilst the common man struggles to barely stay alive.</p>	
MOR_173_002_040623	<p>Locally, it is to be noted that all of these projects will interfere greatly with our vital shipping links to the UK, but this does not appear to bother you greatly. Why should it? Your companies will rake in eye-watering amounts of money for shareholders and senior management. And, of course, you don't have to live on the Island.</p> <p>However, you may be aware of long term plans issued by the UK government some time ago which stipulated that the period leading up to the ubiquitous 2030 will see the demise of all airports except for Belfast, Edinburgh and one in London. One assumes that Ronaldsway Airport on the Isle of Man will also cease to exist.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_173_003_040623	<p>Furthermore, during this same period, shipping is also to be reduced with freight being increasingly moved by rail. Between 2030- 2049 shipping will be removed completely and all freight will be moved only by rail.</p> <p>So, where does that leave the Isle of Man, which cannot possibly rely upon a rail link?</p> <p>I envisage by that time that the population of this Island may well be forcibly removed.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_173_004_040623	As expressed elsewhere wind farms are a very real danger to bird life,	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project’s likely effects on the environment and how they would be assessed. The Applicant’s Scoping Report was followed by the Secretary of State’s Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources. Project specific surveys – including two years of aerial survey data for ornithology and marine mammals – were used to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation that could be embedded into project design for any significant impacts.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been updated where appropriate and included in the respective chapters of the Environmental Statement.</p> <p>The assessments considered disturbance and displacement, collision risk and indirect effects on habitats, prey species.</p> <p>No significant adverse effects were identified for the Project alone, including risk of bird collisions with wind turbine generators, which was assessed as no greater than minor, and not significant for the Project alone for all species recorded in flight at the Project’s windfarm site.</p> <p>Further information on our assessments can be found in Chapter 12: Offshore Ornithology of the Environmental Statement (Document Reference 5.1.12) and the Report to Inform Appropriate Assessment (Document Reference 4.9).</p>
MOR_173_005_040623	ugly monstrosities on either a land or sea scape, and impossible to recycle at the end of what is a very short lifespan.	<p>The Applicant undertook a Seascape, Landscape and Visual Impact Assessment (SLVIA) to understand the extent of views of the Project, as well as any effects on the landscape character. The study area was defined as 60km from the windfarm site and related to the Zone of Theoretical Visibility (ZTV) (Document Reference 5.3.18) as the zone within which likely significant effects may occur.</p> <p>The assessments identified that many views of the Project are either distant and/or heavily influenced by existing operational offshore windfarms, however the introduction of the Project has been assessed to have some significant effects.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>The areas with the most visual effects, which are deemed to be significant, are limited to areas around Fylde and Sefton Coastline in Lancashire. Although there are localised effects on views from this section of the coast, there are no measures available to completely mitigate the significant effects on views experienced by residents of these coastal settlements and tourist visitors. The siting of the Project at long distance offshore is the key measure that minimises potential for significant effects experienced in coastal views.</p> <p>Whilst the size, number and positioning of the WTGs has yet to be finalised, following the statutory consultation in 2023, the Project's windfarm site boundary has been reduced from 125km² to 87km² and the tip height of WTGs has been reduced. This has resulted in the windfarm site having a narrower lateral spread (east to west) and the apparent scale of the WTGs being smaller. The maximum number of WTGs has also been reduced from 40 to 35, which reduces effects.</p> <p>Further information on our assessments can be found in Chapter 18: Seascape, Landscape and Visual Impact Assessment of the Environmental Statement (Document Reference 5.1.18).</p> <p>The Decommissioning Plan for the Project would be submitted to the Secretary of State for approval closer to the time and will take account of relevant circumstances and potential mitigation measures towards the end of the lifetime of the Project.</p>
MOR_173_006_040623	<p>Inevitably, I do not believe that my comments will be taken into consideration as it differs markedly with your company's aims and world agenda. However, I am using my right to free speech (whilst we have it) to express my personal views.</p>	<p>Statutory consultation is a key part of the planning and DCO application process. The Applicant takes consultation and engagement seriously to understand the views from stakeholders and communities.</p> <p>The examination process also provides further opportunity for stakeholders to register as an interested party and have their views heard.</p> <p>The Applicant has submitted a Consultation Report (Document Reference 4.1) that explains how the Applicant has complied with the consultation requirements as set out in the Planning Act 2008 and had regard to all the feedback submitted.</p>
MOR_174_001_040623	<p>Firstly, good on you for bringing more renewable energy to the British Isles. We are in a windy place so it is good to harvest the energy that is out there.</p>	<p>The Applicant notes your response.</p>
MOR_174_002_040623	<p>The wind though causes Navigation issues and my main comment is on the need for significant searoom for the ferries that are the IoM's lifeline for all sorts of supplies in all weathers.</p> <p>Firstly there can be shortages of some basic items, even</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>foodstuffs, on the loM in periods of bad weather and narrow sea corridors for the ferries makes those days more likely where we are short of things. Secondly, the loM's economy is impaired by delays caused by bad weather and an increased likelihood of cancellations. Thirdly, there is inconvenience for passengers with more cancellations that will impact their and their families' lives.</p> <p>So please, please ensure there is plenty of space around the wind farms so that this island community suffers minimum detriment.</p>	<p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_174_003_040623	<p>Lastly, I'm afraid I find your information lacking. The postcard failed to show ferry ports Heysham, Liverpool and Birkenhead and did not show the existing and proposed ferry routes. This suggests to me a lack of understanding of how important ferry routes are to an island. This is our road in the sea for many purposes and I am sorry you have not addressed this important aspect in the mailed material. I would appreciate please hearing why this was omitted.</p>	<p>The Applicant has noted the feedback on the consultation post card content. The purpose of the consultation post card was to promote the statutory consultation for the Project and present the locations of the public consultation events. The postcard included a QR code and website details pointing to where more detailed information on the Project could be found.</p>
MOR_175_001_070623	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)? Seems very comprehensive</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_175_002_070623	<p>Q2 Do you have any comments on our work to understand the technical and environmental constraints of the areas offered to us by the Crown Estate as part of its round 4 leasing process?</p> <p>The ferry routes across the Irish Sea are an essential lifeline for the Manx population. We rely on them for food and all other commodities on the island for which it is not self-sufficient (which is just about everything). It is essential that this transport line is not negatively impacted, i.e., having to make significant detours increases fuel use, thereby having a negative impact on climate change, as well as increased costs of transport which then equals to increased cost of food and other essentials.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA. Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.</p>
MOR_175_003_070623	<p>Q3 Do you have any comments on the possible community benefits of Morecambe Offshore Windfarm, and how the project can support the local, regional and national economy?</p> <p>The same comments as in Q2 apply here. Please copy them across in your Documentation of the results of the consultation.</p> <p>Copied comments: The ferry routes across the Irish Sea are an essential lifeline for the Manx population. We rely on them for food and all other commodities on the island for which it is not self-sufficient (which is just about everything). It is essential that</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>this transport line is not negatively impacted, i.e., having to make significant detours increases fuel use, thereby having a negative impact on climate change, as well as increased costs of transport which then equals to increased cost of food and other essentials.</p>	<p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA. Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions.</p>
MOR_175_004_070623	<p>Q6 Do you have any comments on anything else within this consultation? The effort required to print off these response forms, and write input by hand most certainly has been a deterrent to comment. Why was this not an online system, as every other consultation I have responded to in the last decade has been? My conclusion is that it was to deter public response.</p>	<p>As presented within our suite of consultation materials, feedback could have been submitted using a variety of methods including: Sending an email to hell@morecambeoffshorewind.com, in writing to FREEPOST MORECAMBE GENERATION, using the online feedback form and online feedback map via the consultation website www.morecambeandmorgan.com/morecambe.</p>
MOR_175_005_070623	<p>1.1 Marine Geology, Oceanography and Physical Processes No</p>	<p>The Applicant notes your response.</p>
MOR_175_006_070623	<p>1.5 Marine Mammals Very detailed assessment. Good to see that development will create more habitat for colonisation.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_175_007_070623	<p>1.8 Shipping and Navigation</p> <p>This chapter totally misses the impact on the ferry lines between NW England and Isle of Man. These ferries are not just for tourists - they are a (if not THE) lifeline for the island. We rely on them for food and the essentials for life.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_175_008_070623	<p>1.14 Socioeconomics, Tourism and Recreation</p> <p>The impact on the population of the Isle of Man includes access to food, and all other commodities on which the island population relies. Routes through the wind farm must make adequate access - which should be agreed with the IoM Steam Packet Company.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts to the Isle of Man have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>
MOR_175_009_070623	<p>1.15 Climate Change Wind power generation is an essential component of our minimisation of impact of human activities on the climate. This cannot be underestimated, but we must retain transport to and from the Isle of Man</p>	<p>Further details are presented in Chapter 21 Climate Change (Document Reference 5.1.21) which assesses the greenhouse gas (GHG) emissions of the lifespan of the Project and demonstrates net benefit of GHG emissions, Chapter 2 Need for the Project of the Environmental Statement (Document Reference 5.1.2) and Planning Development Consent and Need Statement (Document Reference 4.8).</p> <p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p>
MOR_176_001_050523	<p>I fully support the Morecambe Offshore Windfarm Generation. Anything has to be better than nuclear.</p>	<p>The Applicant notes your response.</p>
MOR_177_001_050623	<p>"Morecambe Offshore Windfarm Project This note is to provide feedback on the Morecambe Offshore Wind Project consultation currently being conducted. The letter write is a Manx born Island resident. I have extensive experience of passenger consultations having been Chair of the Rail Passengers Committee for North West England from 1998-2005 and Chair of TravelWatch Isle of Man from 2007-2022. Consequently, when I refer to the views of passengers, I am reflecting on long experience of listening to, debating and reading about passenger views.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>I support the principle of building windfarm capacity to help counter climate change. However, I also consider that in designing specific new offshore Windfarms in the North Irish Sea, full account needs to be taken about their impact on existing shipping routes. One of the most important shipping operators in the North Irish Sea is the Isle of Man Steam Packet Company.</p> <p>The Isle of Man Steam Packet Company has been providing a passenger and freight service between the Isle of Man and ports around the Irish Sea for almost 200 years. The routes to Heysham, Fleetwood and Liverpool are particularly significant for passengers and for freight.</p> <p>It is no accident that a book published in the nineteen seventies to mark 150 years of the Steam Packet Company was titled "Island Lifeline". For both passenger and freight services, the Steam Packet provides an essential service to the Island, residents and visitors.</p> <p>As your researchers may know, the Steam Packet requires a range of options available for routing their sailings during challenging weather conditions. So ensuring the continuation of the lifeline service to the Island means that a variety of routes – depending on weather conditions – need to be protected. The detail of those existing necessary options will be for the Isle of Man Steam Packet Company and the Isle of Man Government to define.</p> <p>Even with a range of weather routes, climatic conditions will occasionally force the cancellations of sailings – for example storm force winds and – at the other end of the weather range – very poor visibility. Full account needs to be taken by the developers of the range of weather experienced in the North Irish Sea and the difficulties it presents for shipping.</p> <p>The objective of those planning the Morecambe Windfarm development should be to ensure that the Windfarm development does not impose any further interruptions to shipping services than exist at present.</p> <p>In working towards that end, full account needs to be taken of the impact of the other two windfarm developments in the North Irish Sea – Mona and Morgan. It is curious that the three adjacent developments are not being considered together – at least for their potential impact on shipping.</p>	<p>the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>Disruption of ferry operations and potential impacts to the Isle of Man have been considered cumulatively in the Chapter 14 Shipping and Navigation, Chapter 19 Human Health (Document Reference 5.1.19) and Chapter 20 Socio Economics (Document Reference 5.1.20).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>In addition to not imposing any further interruptions to service, the proposed new Windfarms should not require the Steam Packet to have to deviate from existing shortest and most economical routes. If we are serious about tackling climate change, it would be nonsense to require existing shipping to use more fuel and incur more cost because of diversions caused by Windfarm development.</p> <p>From a passenger perspective, research evidence shows that passengers require services which are reliable, punctual and affordable. It follows that any Windfarm development should avoid adding any cost, delay or reduced reliability on the Steam Packet Company's services. Passengers will expect the Windfarm developers to pay special attention to achieving the objective of not adding any cost, delay or reduced reliability to the existing sea services. Passengers are also likely to seek assurances that these objectives are agreed and that the public are kept up to date with progress on meeting these objectives by regular accessible public information.</p> <p>From an Isle of Man resident's perspective, the current freight options are also crucial for supplying essential goods to the Island's retail and other outlets in a timely fashion. The possibility of the mail service being re-routed from air to sea – currently under review by Royal Mail – is further evidence of the importance of the sea routes to the Island. As a resident I seek an assurance that the development of Windfarms will not add cost or delay to our Island freight services and that the Steam Packet will be able to at least maintain existing reliability.</p> <p>Because the Island has a long established and well developed Tourist Industry, very many people from within the British Isles and from Europe use Steam Packet Services for major events such as the TT races. This peak of shipping activity is a vital component of the Island's economy and must not have additional costs, delays or increased reliability issues imposed on passengers because of the development of Windfarms.</p> <p>In developing plans for the Morgan Windfarm, I expect the Windfarm Developers to engage fully with the Isle of Man Steam Packet Company and the Isle of Man Government and to take full and proper account of any issues raised by</p>	

Unique Reference Identifier	Consultation response received	Applicant response
	<p>those organisations. I also expect the developers to take full account of passenger representations from the wider travelling public based both on and off Island.</p> <p>The importance of the shipping routes is further evidenced by the Isle of Man’s Steam Packet’s decision to invest in at least one large new ship – the “Manxman” will be the largest the Company has operated and is due in service shortly. Previous attempts to seek agreement for Windfarm developments some ten years ago caused considerable concern among the population of the Island and of other regular users of the Steam Packet. These attempts did not proceed in part through a failure to convince the travelling public that the shipping routes of the Steam Packet would be preserved.</p> <p>This note is primarily concerned with the services provided by the Isle of Man Steam Packet Company but the principles outlined in this note should apply to other established shipping interests.</p> <p>In summary, I expect the developers of the Morecambe Offshore Windfarm to fully respect the existing shipping routes of the Isle of Man Steam Packet Company and that any proposals for developing new Windfarms do not impose any additional costs, delays or increased reliability issues on the Steam Packet Company. I also expect the developers to provide regular updates on these issues that are easily publicly accessible so that the Manx Public are kept up to date with progress.</p>	
MOR_178_001_190623	I didn’t copy my feedback from the form, so to summarise – I’m very much an advocate for wind power,	The Applicant notes your response
MOR_178_002_190623	but the concerns of the Isle of Man Steam Packet co carry a lot of weight with me. The steam packet isn’t simply a tourist gimmick – it’s an essential service for the island. As such I would have to see that the Steam Packet company is suitably reassured about the windfarm siting, so that I could support the project	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14) and the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km2 to 87km2 to increase searoom and reduce potential impacts to shipping and navigation.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>A detailed NRA (Document Reference 5.2.14.1) has been undertaken on behalf of the Project. The Project alone has no impact to the Isle of Man Steam Packet Company's (IoMSPCs) Douglas/ Heysham or Liverpool/ Douglas passage plans, with no increase in journey time for these routes and no direct impact to IoMSPCs adverse weather routes.</p> <p>A small reduction in alternative routing options around the Hamilton North Gas Field is identified associated with the Liverpool/ Douglas route but with no direct impacts to operations.</p> <p>Further information on our assessments can be found in Chapter 14 Shipping and Navigation (Document Reference 5.1.14) and the Project NRA (Document Reference 5.2.14.1).</p>
MOR_179_001_040623	<p>Thank you for organising the presentations on the three windfarms you are looking to build in the Irish sea. I absolutely agree the need for renewable wind turbine electricity production.</p>	<p>The Applicant notes your response</p>
MOR_179_002_040623	<p>The positioning of your proposed farms on or near to the course of the IOM Steam Packet routes to Heysham and Liverpool will greatly add to the distance travelled. This in turn will add cost to the fare and increase the time taken and importantly to the carbon footprint. In bad weather it could pose a maritime safety issue. Please note my vehement objection to all three fields. A final question if given the go ahead how would you propose to compensate the Isle of Man Steam Packet and its passengers?</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>The GHG assessment has been updated for the ES to consider the combined GHG emissions arising from the Transmission Assets, for the Morgan Offshore Wind Project and the Morecambe Offshore Windfarm. The Project's whole lifecycle impacts are presented in Section 21.7.1.5 in Chapter 21 Climate Change (Document Reference 5.1.21).</p> <p>The GHG assessment within this chapter considered emission sources directly associated with the Project. However estimates of GHG emissions associated with vessel deviations are included for information.</p>
MOR_180_001_000000	DEAR EVERYONE THANK YOU AND BEST WISHES	The Applicant notes your response
MOR_181_001_270523	Theme 3: Local heritage and archaeology How will it affect the nature of the sea bed for marine wildlife?	<p>In June 2022, the Applicant published a Scoping Report which set out what was understood at the time to be the Project's likely effects on the environment and how they would be assessed. The Applicant's Scoping Report was followed by the Secretary of State's Scoping Opinion, which was provided in August 2022. Since then, a range of environmental and ecological assessments have been carried out to better understand the potential impacts of the Project on the environment.</p> <p>The environmental and ecological assessments were undertaken using a wide range of data sources, including two years of Project specific surveys to understand the potential impacts during the construction, operation and maintenance, and decommissioning phases of the Project, and identify appropriate mitigation to any effects.</p> <p>These initial assessments and potential mitigations were presented in the Preliminary Environmental Information Report (PEIR) at statutory consultation in 2023. These have been included in the respective chapters of the Environmental Statement.</p> <p>Our work has enabled us to identify the most relevant marine mammals in the area. Underwater noise modelling has also been carried out to understand the potential impact of underwater noise on marine mammals. Assessments found that, with the appropriate mitigation for the Project, only 'minor adverse' and 'non-significant' effects to marine mammals would occur. An Outline Marine Mammal Mitigation Protocol (Document</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Reference 6.5) has been submitted with the DCO application which details potential mitigation solutions.</p> <p>Further information on seabed disturbance can be found in Chapter 7 Marine Geology Oceanography and Physical Process (Document Reference 5.1.7).</p>
MOR_181_002_270523	<p>With all of the construction occurring, it will stir up sediment from the seabed. As surrounding ports which the IOMPSC uses (Heysham and Douglas) are already heavily silted up. Will you contribute to the resulting dredging operations which will be required?</p>	<p>Consideration of potential effects on seabed disturbance can be found in Chapter 7 Marine Geology Oceanography and Physical Process (Document Reference 5.1.7).</p>
MOR_182_001_290523	<p>Q1. Do you have any comments on the work we've undertaken on the project to date generally, as well as specifically on the areas listed (1.1-1.16)?</p> <p>While being supportive of the need to reduce or eliminate the use of fossil fuels for energy, this cannot be allowed to seriously impact the future of the Isle of Man and its people. The application of more intelligent and careful planning of windfarms in the Irish Sea will provide for the achievement of the goal of introducing more wind power without endangering our community.</p> <p>This statement below from the Isle of Man Steam Packet Company reflects my views on this issue:-</p> <p>'KEY CONCERNS</p> <p>The safety of navigation for ships when sailing through the wind farm corridors.</p> <p>The lack of open sea room for navigating in rough weather is likely to increase the risk of cancellations on the islands lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods.</p> <p>The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions.'</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_182_002_290523	1.8 Shipping and Navigation See above	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>

Unique Reference Identifier	Consultation response received	Applicant response
MOR_183_001_260523	<p>Inshore fisheries - Gillnetting, Mussels, bass.</p> <p>Fisheries disruption through construction and impact on species</p> <p>WWIFCA engagement. Meeting to discuss? April-Sept. No cockles to Nov</p> <p>Construction. Barrow catches still good. DISTURBANCE. Don't want to loose fishery as a result of w turbines. Have not been engaged. Emailed [REDACTED] a month ago and no reply.</p> <p>Group of 5 fishermen</p> <p>1.1-1.4</p> <p>Mussels on the wall. Liverpool - BURbo Bank and Burbo Bank extension - we felt the frills of the piles and it impacts the mussefls and meant we had no/limited catch.</p> <p>Impact of puling and under water noise from OF turbines on inshore fishderies - is this covered in the Transmission PEIR? Is it covered int he MOrgan/Morecambe Gen PEIR?</p> <p>Interested to understand the imact on inshore fisheries stocks.</p>	<p>Commercial fishing activity has been characterised using landings statistics, publicly available vessel data, and engagement with the fishing industry.</p> <p>Based on an analysis of the location of the Project, fishing activity is expected to be dominated by larger vessels potting for whelk, and to a lesser extent dredging for scallops. With additional mitigation for the construction period, Project effects have been assessed as minor.</p> <p>The Applicant confirms that a Fishing Liaison Officer (FLO) for the Project is in place to maintain regular communication with the local fishery associations. This is presented in the Outline Fisheries Liaison and Coexistence Plan (Document Reference 6.3) which has been included within the DCO application. The plan also refers to the process for justifiable disturbance payments. Consultation with fisheries and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 13 Commercial Fisheries of the Environmental Statement (Document Reference 5.1.13).</p> <p>Consideration of noise impacts on fish in presented in Chapter 10 Fish and Shellfish (Document Reference 5.1.10).</p>
MOR_184_001_270623	<p>I am writing to you as a representative of the Gwynt-y-Mor OFTO plc ('the OFTO'). I am in receipt of a pack of information on the above project that was sent to the OFTO's registered office in Quorum Business Park, Newcastle.</p> <p>Thank you for the pack of information, sent out as part of your consultation for the above project.</p> <p>I have reviewed the Documentation and I note (from Figure 1.2 in Morecambe, Non-Technical Summary) that there is currently no intention for the export cables from the above project to cross or even to come near the OFTO's cables both onshore and offshore, therefore at this time the OFTO has no comments on the above project. Please notify me ASAP should this situation change and the development of the above project encroach in any way on the OFTO's assets, or encaroach on the OFTO's access to these assets, in which case the OFTO might wish to revise its position.</p>	<p>The Applicant notes your response.</p>

Unique Reference Identifier	Consultation response received	Applicant response
	Please can you acknowledge receipt of this e-mail.	

3 Statutory Consultation

3.1 'Limited extension to consultation – 2' feedback and Applicant regard

Unique Reference Identifier	Consultation response received	Applicant response
MOR_186_001_000000	<p>Do you have any comments on the area listed below (1.16)?</p> <p>1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>The recollection that I have of my online answer was my concern that the Irish Sea can remain navigable in most weathers. The proposed wind farms may restrict the Isle of Man Steam Packet ferries from operating in nothing more than fine, calm seas. This would mean the island is cut off from essential supplies in bad weather. As the proposals stand, the population of the Isle of Man will not benefit in any way, neither financially or power wise but has to put up with restrictions to the movement of supplies and its people. I am a supporter of wind energy and other renewables – it is important that we have good connections however.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_187_001_110923	<p>Do you have any comments on the area listed below (1.16)?</p> <p>1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>This development will significantly interfere with the vital sea link to the Isle of Man and present on going risks to the islands ferry service, especially during the late autumn to early spring sailings. There are no circumstances where this project will benefit the Isle of Man and its residents. Given the risk of interference to the Isle of man and its economic interests and lack of benefits from the electric to be generated. I object to this proposed development.</p> <p>Re Morgan Generation Scheme this development will interfere with the vital sea link to the Isle of Man and present an ongoing risk to the islands ferry service especially from the autumn to spring sailings There are no circumstances where this project will benefit the isle of man, its residents or its economy. This development offers no benefit of any form to the Isle of Man. There is no electric or electrical generation benefit. I object to this proposed development.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects.</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p> <p>The Isle of Man (IoM) is connected to the UK National Grid, via an interconnector cable, which runs beneath the sea, between Douglas on the IoM and Bispham, on the Lancashire coast. This means that, when the electricity generated is fed into the national grid, the Manx Utilities Authority will be able to draw on the power generated to help meet the needs of IoM residents and businesses.</p> <p>The Applicant has created a portal on the Project website (www.morecambeoffshorewind.com) to enable local companies to pair their skills with the Project's needs. The portal provides access for companies of all sizes to register their interest for future work. The Applicant has encouraged any relevant suppliers based on the IoM to register their interest, so they can help to deliver this important Project.</p>
MOR_188_001_000000	<p>Do you have any comments on the area listed below (1.16)?</p> <p>1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>Short term traffic disruption during installation and commissioning can be effectively managed and will likely have minimal impact on the local community. Wind turbines in other North West locations are seen by some as a visitor attraction</p>	The Applicant notes your response.
MOR_189_001_180923	<p>Do you have any comments on the area listed below (1.16)?</p> <p>1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>Your letter of 25 August has asked for more specific feedback re Traffic & Transport. I could not believe that the shipping lanes between this Island, which is self-sufficient and does not rely on the UK Parliament, and the UK ports of Heysham and Liverpool are not sacrosanct.</p> <p>Historically for around 100 years or more a return ferry has operated twice each 24 hours for 364 days a year between and these two UK ports. The route has been the same for all those years, and is constant apart from in particularly bad weather when a slightly different, and longer, route is taken to avoid the worst of the weather when the wind is very strong in particular directions.</p> <p>We see that the planned windfarms will cause the shipping lanes to change, and the journey be longer, and likely to make it impossible to keep to this 24 hour timetable</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>in particularly bad weather. We never envisioned that these daily shipping lanes would not take precedence over any proposed extended windfarms in the Irish Sea, and we are appalled that this could be contemplated. If implemented in the way planned, this would cause huge disruption to the daily timetables in bad weather, and therefore we protest violently against those wind turbines which will impede the historic routes of our ferries, which are fundamental to the economy and pleasant lifestyle of this Island.</p>	<p>significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
<p>MOR_190_001_180923</p>	<p>Do you have any comments on the area listed below (1.16)? 1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>Spirit Energy's response to Q1, 1:16 is as follows; "Many elements of OWL's construction plans are not yet articulated, including those in respect of quayside, port, and aviation bases. Spirit needs to understand the locations and details of these and the activities within and around these locations in order to determine the potential impact on our infrastructure and operations. Spirit requests that the wind farm developers commence dialogue on these matters as soon as it is possible for them to do so."</p>	<p>The Applicant has yet to determine which port(s) will be used during the construction phase and the operational and maintenance phase for the Project. A decision on the port selection and heliport selection will be made post consent. We will continue to engage with Spirit Energy as further details are defined.</p> <p>Details of the Project components and estimated vessel and helicopter movements are provided in Chapter 5 Project Description (Document Reference 5.1.5). It is anticipated that during the construction and operation and maintenance phases helicopters would route from Blackpool Airport or Liverpool Airport, however this is indicative at this stage and subject to change.</p> <p>Engagement is ongoing with Spirit Energy on the terms of suitable cooperation and coexistence agreements, with protective provisions included in the draft DCO for completeness.</p>
<p>MOR_191_001_060923</p>	<p>Do you have any comments on the area listed below (1.16)? 1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>I'm sending a summary of what I said in the statutory consultation about the Morecambe Offshore Wind Generation Assets. I live on the Isle of Man. We use the ferries a lot to get back to the UK and the island depends on shipping for transport of supplies, inhabitants and tourists to and from the island. I'm very worried that in all weathers but particularly poor weather over autumn, winter and early spring, that there's less leeway for ferries when making crossings as I understand that the offshore wind farms will cause obstructions and narrow shipping lanes considerably. This is my main objection but not sole objection to this and other developments nearby. I've given the same feedback to the other ones too.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_192_002_290823	<p>Do you have any comments on the area listed below (1.16)? 1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>Thank you for your email and letter. I have not been able to find a copy of my initial response, but I do not think that I have any further comments to make about traffic and transport. There is nothing in the Documentation which would cause me any concern and I am in support of the project.</p>	The Applicant notes your response.
MOR_193_001_260823	<p>Do you have any comments on the area listed below (1.16)? 1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>Thank you for your email but I am sorry I have not been able to check on my comments as I have had problems with my iPad and cannot restore items. The only things I can remember are the topics of the some of the comments I made. I was concerned about our links to uk with the steam packet in bad weather and the extra time this may take.</p> <p>What mitigations have been identified to reduce these effects? With regard to other items I wanted to ask about studies on sea animals to decide “No significant effects have been made”</p> <p>Generally I think as much information as possible should be given to the people of the Isle of Man.</p> <p>I have spent over 2 hours this morning going through all of you literature, and searched my Brain to try and remember what I said. Hope this might help.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigation Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the windfarm site boundary has been reduced from 125km² to 87km². The Applicant has worked together with the developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project who have also made commitments to reducing the boundary of the windfarm sites for their respective projects to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Round 4 offshore windfarm projects in the Irish sea. The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the NRA and CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Consideration of the potential cumulative effects with the Round 4 projects, including adverse weather, is presented in the CRNRA and reflected in Section 14.8 of Chapter 14 Shipping and Navigation. The ferry companies and other key stakeholders have provided input to this process through attendance at navigation</p>

Unique Reference Identifier	Consultation response received	Applicant response
		simulations and a hazard workshop. These changes are reflected in the NRA and Chapter 14 Shipping and Navigation submitted as part of the Application.
MOR_194_001_250823	<p>Do you have any comments on the area listed below (1.16)? 1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>Thank you for following up my comments. I don't have any views on the sections you highlighted. My concerns are for animal/bird welfare and hoping not too much of an area of beauty is destroyed. Thank you for your help.</p>	The Applicant notes your response.
MOR_195_001_260823	<p>Do you have any comments on the area listed below (1.16)? 1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>You have asked me to comment on section 1.6 of the feedback form on offshore wind farm plans. I have read the information provided in the PEIR section of the proposals and can see that investigations have been carried out to assess the impact on maritime traffic in the region. Since there is ongoing dialogue between all identified stakeholders, and a willingness to mitigate impact, I feel confident in a favourable resolution to any issues that may be raised. My own interest in this matter is simply as a resident of Morecambe who is concerned about the environment.</p>	The Applicant notes your response.
MOR_196_001_000000	<p>Do you have any comments on the area listed below (1.16)? 1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>I am a supporter of renewable energy and have no quibble with the building of wind farms in the Irish Sea. My concern is with the siting of the Morgan & Mona projects, which will significantly impact the future of our island. I attach a copy of the Isle of Man Steam Packet "Key Concerns" which I endorse.</p> <p>"KEY CONCERNS"</p> <ul style="list-style-type: none"> * The safety of navigation for ships when sailing through the wind farm corridors. *The lack of sea room for navigating in rough weather is likely to increase risk of cancellations on the island's lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods. *The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions. 	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project,</p>

Unique Reference Identifier	Consultation response received	Applicant response
		<p>the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_197_001_000000	<p>Do you have any comments on the area listed below (1.16)?</p> <p>1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>I am a supporter of renewable energy and can see the benefit of building of wind farms in the Irish Sea. My concern is with the siting of the Morgan & Mona projects, which would appear to significantly impact the vital sea rout links to the Isle of Man. These are laid out in the Isle of Man Steam Packet “Key Concerns” which I agree with</p> <p>“KEY CONCERNS”</p> <ul style="list-style-type: none"> * The safety of navigation for ships when sailing through the wind farm corridors. *The lack of sea room for navigating in rough weather is likely to increase risk of cancellations on the islands lifeline routes. This will affect passengers, hauliers and the wider population of the Isle of Man through delays and disruptions to shipments of essential goods. *The consequences of extra sailing distance imposed on lifeline routes, requiring more fuel, leading to increased fuel costs and greater CO2 emissions. 	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p> <p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_198_001_200923	<p>Do you have any comments on the area listed below (1.16)?</p> <p>1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>I received a letter stating due to a technical error you could not capture my response to question 1.16 of my feedback. Unfortunately I did not take a copy of my answers and June is quite awhile ago now.</p>	<p>Consultation with ferry route operators and other key stakeholders has been extensive throughout the development of the Project as presented within Chapter 14 Shipping and Navigation of the Environmental Statement (Document Reference 5.1.14), the Navigation Risk Assessment (NRA) (Document Reference 5.2.14.1), and Cumulative Regional Navigational Risk Assessment (CRNRA) (Document Reference 5.2.14.2).</p>

Unique Reference Identifier	Consultation response received	Applicant response
	<p>To attempt to re-answer the question, I would say no development should be permitted that impacts current journey routes between Heysham and Liverpool to the Isle of Man, either in time it takes or extra costs by going a different/longer route due to windfarm expansion. The sea route is vital to the existence of transport on and off the Island, such as food, post and other goods. Travel times to places outside the UK are already longer than for people in the UK as an extra day is usually allowed either side of any holiday if travelling by boat to the UK, so I also wouldn't want this to be made worse. There has this summer been issues where the airport has been closing 5 times a day and I believe it is now 2 times a day, so that's not a reliable mode of transport, and if the shipping goes is made worse, how do we get good over or travel reliably. I also don't believe windfarms are product enough and aren't worth the money invested into the infrastructure, and I believe only return 30% of cost. It may help the UK meet its renewable energy quota but the IOM is not part of the UK. The IOM is also an UNESCO biosphere. If the IOM has territorial rights for 12 miles off it shores, the UK should have the same so a windfarm should be inside that and not block any shipping lanes. When the weather is poor especially in winter the boats have to take different routes so you just can't put a windfarm in location X hoping a boat doesn't need to go near it as in poor weather and depending upon wind direction it may need to when it wouldn't normally. We can't go 5 days without suppliers for example; about a year or two ago we went 4 days, it was bad.</p>	<p>Following the feedback received at statutory consultation in 2023, the Project windfarm site boundary has been reduced from 125km² to 87km². The developers of the Morgan Offshore Wind Project Generation Assets and Mona Offshore Wind Project have also made commitments to amending the boundaries of their respective projects. The changes made to the boundaries of all three projects-were made to increase searoom and reduce potential impacts to shipping and navigation.</p> <p>A detailed CRNRA has been undertaken on behalf of all Irish Sea Round 4 offshore windfarm projects (Morecambe, Morgan and Mona). The CRNRA brought together significant analysis, consultation, navigation simulations and the findings from hazard workshops to determine the cumulative risks associated with the Round 4 Projects. Key stakeholders participated in the hazard workshop and had the opportunity to input into the hazard scoring process. Where hazards were relevant to the Project, the Project NRA, and the CRNRA both concluded that following the changes to the boundaries, all hazards have been reduced to acceptable levels.</p> <p>Further information on our assessments, including consideration of adverse weather routes, can be found in Chapter 14 Shipping and Navigation, the Project NRA and CRNRA.</p>
MOR_199_001_250923	<p>Do you have any comments on the area listed below (1.16)? 1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>Earlier this year I provided you with my reaction on your windfarm plans in the Irish Sea, east of the beautiful and Unesco natural heritage Isle of Man. You were unable to capture my response to question 1, part 1.16 You provided me with the opportunity to respond to the question above.</p> <p>I suppose you mean the area and traffic and transport. 1, part 1.16 isn't even a question, so I cannot answer.</p> <p>I am sorry, but I do not understand your 'question' and I have the feeling you will not help me with this. If you ask ordinary people like me to respond on your plans, you cannot expect people to use your 'template'. So, this might be a way to stop people to object. You have strict deadlines and force reactions to be given only on your terms.</p> <p>No, I don't want your wind turbines Parc in our Irish sea. Wind turbines cause a lot of damage and there will never be sufficient energy. Even a Manx geologist has now come forward with the same conclusion.</p>	The Applicant notes your response.

Unique Reference Identifier	Consultation response received	Applicant response
	Kind regards or do I have to say 'Bye'	
MOR_200_001_000000	<p>Do you have any comments on the area listed below (1.16)?</p> <p>1.16 Traffic and Transport See our PEIR NTS and chapter 22</p> <p>1 The area to the bottom of the village Thames Street is a bridle path that is much needed for safe off road riding. 2 A public right of way through to Freckleton bypass. 3 Directly obscuring the views of houses on school lane, which will mean that the residents on school lane will suffer from the project devaluing properties. 4 The village has had lots of housing but the planned large buildings will be a blot on the landscape and ruin the whole landscape. We already have the nuclear facility in this postcode so this will make this area a blot on the landscape. Penwortham has none of this. The area has had fracking which caused earth tremors, also the nuclear facility very close to the Newton. Please consider Penwortham as the position of hte town is much more suitable for this project and is a better location. I am a resident on School Lane and don't want to look out on 80ft industrial buildings. I have to voice my opposition we have worked a lifetime to pay off the mortgage on a house that will devalue if your plan comes to fruition. Please do not choose Newton and if the plan goes ahead, compensate houses on school lane that are affected by the view.</p>	<p>Given that the Project is completely offshore, The Applicant has no further comment as feedback refers to the Morgan and Morecambe Offshore Wind Farms: Transmission Assets project.</p>