Partners in UK offshore wind

MONA OFFSHORE WIND PROJECT

Appendix to Response to WRs: NRW

Deadline: 2

Application Reference: EN010137

Document Reference: S_D2_3.2

Document Number: MOCNS-J3303-RPS-10290

27 August 2024

F01

Image of an offshore wind farm

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Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
F01	Submission at D2	RPS	Mona Offshore Wind Ltd	Mona Offshore Wind Ltd	27 Aug 2024

Prepared by:

RPS

Prepared for:

Mona Offshore Wind Ltd.

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Glossary

Term	Meaning
Applicant	Mona Offshore Wind Limited.
Appropriate Assessment	A step-wise procedure undertaken in accordance with Article 6(3) of the Habitats Directive, to determine the implications of a plan or project on a European site in view of the site's conservation objectives, where the plan or project is not directly connected with or necessary to the management of a European site but likely to have a significant effect thereon, either individually or in-combination with other plans or projects.
Bodelwyddan National Grid Substation	This is the Point of Interconnection (POI) selected by the National Grid for the Mona Offshore Wind Project.
Competent Authority	Regulation 6(1) defines competent authorities as "any Minister, government department, public or statutory undertaker, public body of any description or person holding a public office".
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Project (NSIP).
Environmental Statement	The document presenting the results of the Environmental Impact Assessment (EIA) process for the Mona Offshore Wind Project.
Evidence Plan Process	The Evidence Plan process is a mechanism to agree upfront what information the Applicant needs to supply to the Planning Inspectorate as part of the Development Consent Order (DCO) applications for the Mona Offshore Wind Project.
Expert Working Group (EWG)	Expert working groups set up with relevant stakeholders as part of the Evidence Plan process.
Inter-array cables	Cables which connect the wind turbines to each other and to the offshore substation platforms. Inter-array cables will carry the electrical current produced by the wind turbines to the offshore substation platforms.
Interconnector cables	Cables that may be required to interconnect the Offshore Substation Platforms in order to provide redundancy in the case of cable failure elsewhere.
Intertidal access areas	The area from Mean High Water Springs (MHWS) to Mean Low Water Springs (MLWS) which will be used for access to the beach and construction related activities.
Intertidal area	The area between MHWS and MLWS.
Landfall	The area in which the offshore export cables make contact with land and the transitional area where the offshore cabling connects to the onshore cabling.
Local Authority	A body empowered by law to exercise various statutory functions for a particular area of the United Kingdom. This includes County Councils, District Councils and County Borough Councils.
Local Highway Authority	A body responsible for the public highways in a particular area of England and Wales, as defined in the Highways Act 1980.
Marine licence	The Marine and Coastal Access Act 2009 requires a marine licence to be obtained for licensable marine activities. Section 149A of the Planning Act 2008 allows an applicant for a DCO to apply for a

Term	Meaning
	'deemed' marine licence as part of the DCO process. In addition, licensable activities within 12nm of the Welsh coast require a separate marine licence from Natural Resource Wales (NRW).
Maximum Design Scenario (MDS)	The scenario within the design envelope with the potential to result in the greatest impact on a particular topic receptor, and therefore the one that should be assessed for that topic receptor.
Mona 400kV Grid Connection Cable Corridor	The corridor from the Mona onshore substation to the National Grid substation at Bodelwyddan.
Mona Array Area	The area within which the wind turbines, foundations, inter-array cables, interconnector cables, offshore export cables and offshore substation platforms (OSPs) forming part of the Mona Offshore Wind Project will be located.
Mona Array Scoping Boundary	The Preferred Bidding Area that the Applicant was awarded by The Crown Estate as part of Offshore Wind Leasing Round 4.
Mona Offshore Cable Corridor	The corridor located between the Mona Array Area and the landfall up to MHWS, in which the offshore export cables will be located.
Mona Offshore Cable Corridor and Access Areas	The corridor located between the Mona Array Area and the landfall up to MHWS, in which the offshore export cables will be located and in which the intertidal access areas are located.
Mona Offshore Transmission Infrastructure Scoping Search Area	The area that was presented in the Mona Scoping Report as the area encompassing and located between the Mona Potential Array Area and the landfall up to MHWS, in which the offshore export cables will be located.
Mona Offshore Wind Project	The Mona Offshore Wind Project is comprised of both the generation assets, offshore and onshore transmission assets, and associated activities.
Mona Offshore Wind Project Boundary	The area containing all aspects of the Mona Offshore Wind Project, both offshore and onshore.
Mona Offshore Wind Project PEIR	The Mona Offshore Wind Project Preliminary Environmental Information Report (PEIR) that was submitted to The Planning Inspectorate (on behalf of the Secretary of State) and NRW for the Mona Offshore Wind Project.
Mona Offshore Wind Project Scoping Report	The Mona Scoping Report that was submitted to The Planning Inspectorate (on behalf of the Secretary of State) and NRW for the Mona Offshore Wind Project.
Mona Onshore Cable Corridor	The corridor between MHWS at the landfall and the Mona onshore substation, in which the onshore export cables will be located.
Mona Onshore Development Area	The area in which the landfall, onshore cable corridor, onshore substation, mitigation areas, temporary construction facilities (such as access roads and construction compounds), and the connection to National Grid substation will be located
Mona Onshore Transmission Infrastructure Scoping Search Area	The area that was presented in the Mona Scoping Report as the area located between MHWS at the landfall and the onshore National Grid substation, in which the onshore export cables, onshore substation and other associated onshore transmission infrastructure will be located.
Mona PEIR Offshore Cable Corridor	The corridor presented at PEIR that was consulted on during statutory consultation and has subsequently been refined for the application for Development Consent. It is located between the Mona Array Area and

Term	Meaning
	the landfall up to MHWS, in which the offshore export cables and the offshore booster substation will be located.
Mona PEIR Offshore Wind Project Boundary	The area presented at PEIR containing all aspects of the Mona Offshore Wind Project, both offshore and onshore. This area was the boundary consulted on during statutory consultation and subsequently refined for the application for Development Consent.
Mona Potential Array Area	The area that was presented in the Mona Scoping Report and in the PEIR as the area within which the wind turbines, foundations, meteorological mast, inter-array cables, interconnector cables, offshore export cables and OSPs forming part of the Mona Offshore Wind Project were likely to be located. This area was the boundary consulted on during statutory consultation and subsequently refined for the application for Development Consent.
Mona Proposed Onshore Development Area	The area presented at PEIR in which the landfall, onshore cable corridor, onshore substation, mitigation areas, temporary construction facilities (such as access roads and construction compounds), and the connection to National Grid infrastructure will be located. This area was the boundary consulted on during statutory consultation and subsequently refined for the application for Development Consent.
Mona Scoping Report	The Mona Scoping Report that was submitted to The Planning Inspectorate (on behalf of the Secretary of State) and NRW for the Mona Offshore Wind Project.
National Policy Statement (NPS)	The current national policy statements published by the Department for Energy Security & Net Zero in 2024.
Non-statutory consultee	Organisations that an applicant may choose to consult in relation to a project who are not designated in law but are likely to have an interest in the project.
Offshore Substation Platform (OSP)	The offshore substation platforms located within the Mona Array Area will transform the electricity generated by the wind turbines to a higher voltage allowing the power to be efficiently transmitted to shore.
Offshore Wind Leasing Round 4	The Crown Estate auction process which allocated developers preferred bidder status on areas of the seabed within Welsh and English waters and ends when the Agreements for Lease (AfLs) are signed.
Pre-construction site investigation surveys	Pre-construction geophysical and/or geotechnical surveys undertaken offshore and, or onshore to inform, amongst other things, the final design of the Mona Offshore Wind Project.
Point of Interconnection	The point of connection at which a project is connected to the grid. For the Mona Offshore Wind Project, this is the Bodelwyddan National Grid Substation.
Relevant Local Planning Authority	The Relevant Local Planning Authority is the Local Authority in respect of an area within which a project is situated, as set out in Section 173 of the Planning Act 2008. Relevant Local Planning Authorities may have responsibility for discharging requirements and some functions pursuant to the DCO, once made.
the Secretary of State for Business, Energy and Industrial Strategy	The decision maker with regards to the application for development consent for the Mona Offshore Wind Project.

Term	Meaning
Statutory consultee	Organisations that are required to be consulted by an applicant pursuant to the Planning Act 2008 in relation to an application for development consent. Not all consultees will be statutory consultees (see non-statutory consultee definition).
Wind turbines	The wind turbine generators, including the tower, nacelle and rotor.
The Planning Inspectorate	The agency responsible for operating the planning process for NSIPs.

Acronyms

Acronym	Description
AfL	Agreement for Lease
BEIS	Department for Business, Energy and Industrial Strategy
BNG	Biodiversity net gain
DCO	Development Consent Order
EIA	Environmental Impact Assessment
EnBW	Energie Baden-Württemberg AG
EWG	Expert Working Group
HVAC	High Voltage Alternating Current
IEF	Important Ecological Feature
IEMA	Institute for Environmental Management and Assessment
ISAA	Information to support the Appropriate Assessment
MDS	Maximum Design Scenario
MHWS	Mean High Water Springs
MLWS	Mean Low Water Springs
NBB	Net Benefits for Biodiversity
NRW	Natural Resources Wales
NSIP	Nationally Significant Infrastructure Project
NTS	Non-Technical Summary
OSP	Offshore Substation Platform
PDE	Project Design Envelope
PEI	Preliminary Environmental Information
PEIR	Preliminary Environmental Information Report
POI	Point of Interconnection
SAC	Special Area of Conservation
SoCC	Statement of Community Consultation
SPA	Special Protection Area

Acronym	Description
TCE	The Crown Estate
WTW	Wildlife Trust Wales
TWT	The Wildlife Trusts

Units

Unit	Description
GW	Gigawatt
km	Kilometres
km^2	Kilometres squared
kV	Kilovolt
MW	Megawatt
nm	Nautical miles

1 Response To NRW's Written Representation

1.1 Introduction

1.1.1.1 Details of the Applicant's response to the Written Representations (WRs) of Natural Resources Wales (NRW) are set out in the document below.

1.1.1.2 The Applicant has numbered the WRs in line with the Planning Inspectorate's document library, with subsequent paragraph number e.g. REP1-056.1, REP1-056.2 etc.

2 RESPONSES TO NRW's WRITTEN REPRESENTATIONS

Table 2.1: REP1-056 - Natural Resources Wales (NRW)

Reference	Written Submission Comment	Applicant's response
REP1-056.1	NRW (A) disagrees with approaches used by the Applicant in various aspects of the assessments (including age class apportioning, non-breeding season methods for apportionment of impacts, sabbaticals, approach to seasonal definitions particularly for collision risk assessments, displacement assessment to designated sites not covering the full range of advised displacement and mortality rates). We also note that there are a number of errors in the seasonal abundance figures presented in the assessment. NRW (A) advises that the errors in the figures are corrected, and that assessments (Environmental Impact Assessment (EIA) and Habitats Regulation Assessment (HRA) scale) are updated to account for corrected figures in order for the most appropriate figures for displacement and collision risk for the Mona project alone to be made available for use in future projects cumulative and in-combination assessments. We also advise that assessments taking account of updated figures are presented following our advised approaches so that a fully informed judgement on potential levels of impact can be made. If any updated potential impact exceeds 1% of baseline mortality of the relevant population, then consideration will need be given to undertaking a Population Viability Analysis (PVA) – we would be happy to advise further.	The Applicant acknowledges NRW's comments and has responded to each of the points raised by NRW below.
REP1-056.2	NRW (A) advises that a detailed assessment of the potential impacts of the project on the breeding seabird features of Pen-y-Gogarth / Great Orme's Head Site of Special Scientific Interest (SSSI) (guillemots, razorbills and kittiwakes) should be undertaken, as currently this has not been done sufficiently to assess effects on these features. We advise that the effects of displacement on auks and collision risk mortality of kittiwakes should be further assessed.	The Applicant notes that NRW raised this matter in their Relevant Representation (RR-011). As outlined in the Applicant's Response to Relevant Representations (PDA-008), the Applicant submitted an Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037) note at Deadline 1. This document provides an annual assessment of the impact of the Mona Offshore Wind Project alone on black-legged kittiwake, razorbill and common guillemot from Pen y Gogarth/Great Orme's Head SSSI as requested by NRW in their Relevant Representation (RR-011) and Written Representation (REP1-056).

Reference	Written Submission Comment	Applicant's response
REP1-056.3	The Applicant's cumulative (and in-combination) impact assessments contain numerous data gaps and NRW (A) advise that they cannot be considered comprehensive. Additionally, there are errors in the figures included for other projects with data available (e.g. Erebus), and since the Morgan generation assets DCO application has been reviewed, there are multiple discrepancies between the numbers included for other projects between the two project applications. Hence, we consider it inappropriate to comment on the potential significance of cumulative (or in-combination) impacts presented at this stage. We strongly advise that the Applicant considers the advice given and works with the Morgan generation assets and Morecambe generation assets projects (also located in the Irish Sea and submitted applications and will be in examination at the same time as the Mona project) to address our concerns with the gaps and errors and ensure all three projects are assessing the same cumulative and in-combination totals.	The Applicant acknowledges NRW's comment regarding data gaps in the Applicant's cumulative and in-combination assessments presented in Volume 2, Chapter 5: Offshore ornithology (APP-057) and the HRA Stage 2 ISAA Part Three: Special Protection Areas and Ramsar sites Assessments (APP-033), respectively. Please see the Applicant's response to REP1-056.59 for further information in relation to this point. The Applicant acknowledges some discrepancies within the cumulative abundances used within Volume 2, Chapter 5: Offshore Ornithology (APP-057) (e.g. using the Erebus abundance numbers from their Environmental Statement and not the Supplementary Information). As stated in the Applicant's Response to Relevant Representations (PDA-008), these discrepancies were included in the Errata Sheet (REP1-044) submitted at Deadline 1. As outlined in paragraph 1.1.1.4 of the Errata Sheet (REP1-044), the Applicant confirmed that updated versions (tracked and clean) of the offshore ornithology application material would be provided at Deadline 2 to address the errata presented in the Errata Sheet (REP1-044). The Applicant confirms that the following application documents have been updated and submitted at Deadline 2 to address the errata presented in the Errata Sheet (REP1-044) and any further discrepancies considered to be errata identified in NRW's and the Joint Nature Conservation Committee's Written Representations (REP1-056; REP1-066/REP1-067, respectively): • Volume 2, Chapter 5: Offshore ornithology (F2.5 F02); • Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical Report (F6.5.2 F02); • Volume 6, Annex 5.3: Offshore ornithology collision risk modelling technical report (F6.5.3 F02); • Volume 6, Annex 5.5: Offshore ornithology apportioning technical report (F6.5.5 F02); • Volume 6, Annex 5.6: Offshore ornithology population viability analysis technical report (F6.5.6 F02); • HRA Stage 1 Screening Report (E1.4 F02); • Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02); and

Reference	Written Submission Comment	Applicant's response
		• HRA Integrity Matrices (E1.5 F02). The Applicant can confirm that the amendments to the application documents outlined above do not alter the conclusions presented. Further information regarding these updates can also be found in the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) and the Schedule of Changes to the Offshore Ornithology EIA and HRA documents (S_D2_7) submitted at Deadline 2. Abundances and collision estimates used within Volume 2, Chapter 5: Offshore Ornithology (APP-057) for other projects were collectively agreed with the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets for the Mona Offshore Wind Project development consent order (DCO) application. Please see REP1-056.69 below for further information regarding differences that have since arisen following the submission of the DCO applications for Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets. The Applicant can confirm that it is actively engaging with the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets to align cumulative and in-combination assessments where possible. However, it should be noted that these projects are being examined separately by different Examining Authorities and with a different principal statutory nature conservation body (Natural England as opposed to Natural Resources Wales).
REP1-056.4	NRW (A) advises that adherence to an offshore Environmental Management Plan (EMP) that will include measures to minimise disturbance to rafting birds from transiting vessels, a timing restriction of no offshore export cable installation during the period 1st November – 31st March within Liverpool Bay Special Protection Area (SPA), and include a Marine Pollution Contingency Plan (MPCP) is required in order to avoid or reduce disturbance and displacement to the red-throated diver and common scoter features of Liverpool Bay SPA. The plan and the specific measures to be contained within it will need to be secured in the marine licence.	The Applicant confirms that it has committed to the development of and adherence to an offshore environmental management plan (EMP). This will include details of Measures To Minimise Disturbance To Marine Mammals And Rafting Birds From Transiting Vessels (APP-203) as set out within Schedule 14 Condition 18(1)(e)(vi) of the draft development consent order (C1 draft Development Consent Order F04). Such measures include a timing restriction of no offshore export cable installation during the period 1 November to 31 March within the Liverpool Bay Special Protection Area (SPA) and a Marine Pollution Contingency Plan (MPCP). The Applicant intends to secure an offshore EMP in the standalone ML. Please see the Marine Licence Principles Document (Marine Licence Principles Document (J9 F03), row 'Project Environmental Management Plan (PEMP)'.

Reference	Written Submission Comment	Applicant's response
REP1-056.5	Marine Mammals 43. NRW (A) previously advised that the assessment and/or consideration of the impacts of underwater noise on marine mammals, such as vessel noise, deployment of acoustic deterrent devices to mitigate from the effects of piling, potential cumulative barrier effects, and inter-related effects, was insufficient and needed to be improved in order to enable the risks to be fully and adequately assessed.	The Applicant welcomes the response from NRW in REP1-056.5 to REP1-056.9. The Applicant notes NRW's advice regarding the requirement for European Protected Species (EPS) licences and intends to submit an EPS licence application post consent for any activities which have the potential to impact marine mammals prior to the commencement of the activity, as per the Conservation of Habitats and Species Regulations 2017 ('the Regulations') and Conservation of Offshore Marine Habitats and Species Regulations 2017 as amended. Please also see Other Consents or Licences Required (APP-185).
REP1-056.6	44. NRW (A) is now satisfied that a number of the concerns we raised relating to the assessment of impacts of underwater noise on marine mammals have been addressed through additional information supplied by the Applicant. We welcome the commitment of the Applicant to continue to engage with NRW (A) to develop the Underwater Sound Management Strategy (USWMS) during examination and post-consent, and we welcome the opportunity to do so.	
REP1-056.7	45. NRW (A) advises that the proposal has the potential to impact marine mammals; cetaceans (dolphins, porpoises and whales) are protected pursuant to the list made under section 7 of the Environment (Wales) Act 2016, as well as being European Protected Species (EPS) protected by Schedule 2 of the Conservation of Habitats and Species Regulations 2017 ('the Regulations') as amended. It is an offence under Regulation 43 of the Regulations to inter alia deliberately capture, injure, kill, or disturb such species or to damage or destroy their breeding site. This reflects the system of strict protection afforded to such species under the provisions of the Habitats Regulations.	
REP1-056.8	46. However, an EPS licence may be granted by NRW (A), as the relevant licensing body, for the purposes specified in Regulation 55(2) of the Regulations.	
REP1-056.9	47. We advise that mitigation is required for EPS protection and needs to be regulated by the Marine Licence and / or the European Protected Species licence.	

Reference	Written Submission Comment	Applicant's response
REP1-056.10	Fish & Shellfish Ecology 48. NRW (A) advises that piling noise from the proposed development has the potential to impact a significant proportion of spawning cod, protected under section 7 of the Environment (Wales) Act 2016. Whilst the Applicant has addressed some of our comments within the relevant representations, impact to spawning cod remains a primary concern.	The Applicant notes NRW's comment.
REP1-056.11	49. Whilst some concerns with respect to underwater noise impacts have been addressed by the Applicant, NRW (A) still requires additional clarity to ensure that the worst-case scenario has been accurately assessed.	The Applicant notes NRW's comment.
REP1-056.12	50. We welcome the inclusion of the UWSMS in both the deemed and standalone marine licences. Furthermore, we welcome the commitment of the Applicant to continue to engage with NRW (A) to develop the USWMS during examination and post-consent. However, we consider that the document requires work to ensure it achieves its objectives.	The Applicant notes NRW's feedback and would welcome further engagement with NRW on the Outline Underwater Sound Management Strategy (UWSMS) (APP-202), with the understanding that the UWSMS will be finalised post-consent when the final design and construction parameters are known to ensure appropriate measures are implemented, where required.
REP1-056.13	Physical Processes 51. No assessment has been carried out to determine how the potential placement of cable protection in the shallow nearshore environment would impact on coastal and physical processes.	The Applicant recognises that the best form of cable protection is achieved through cable burial to the required depth. It is not the Applicant's intention to place cable protection in shallow water but to avoid this where possible. The Applicant is also committed to ensuring that no more than a 5% reduction in water depth (referenced to Chart Datum) will occur at any point along the Mona offshore cable corridor without prior written approval from the Licensing Authority in consultation with the MCA (as per the Mitigation and Monitoring Schedule (J10 F02)). The Applicant has confirmed in its response to RR-011.53 of the Applicant's Response to Relevant Representations (PDA-008), that the height of the cable protection above the seabed may be altered in relation to the given water depth at any point along the export cable corridor in order to adhere to the commitment, ensuring that any cable protection is sufficiently low profile to cause minimal changes to wave, tide and sediment transport. Thus, implicitly, the detailed design (either by location, installation methodology or type of cable protection) will ensure there are no significant impacts. Please refer to comment REP1-056.182 for further information.

Reference	Written Submission Comment	Applicant's response
REP1-056.14	52. NRW (A) continue to advise that consideration should be given to the obstruction to the bedload sediment transport pathways both alongshore and onshore/offshore, and the potential impact on wave diffraction and wave refocussing on the coast, to ensure that the assessment of physical process is as complete and robust as possible.	Please refer to the Applicant's response to REP1-056.13 and REP1-056.182 for further information.
REP1-056.15	53. NRW (A) are unable to advise on the need for monitoring provisions in respect of risk of exposure of landfall cables due to beach profile change, erosion of the backshore and short-term beach draw-down during storms until further assessment is undertaken.	The Applicant has made a commitment to trenchless techniques in the intertidal area. The Applicant has confirmed in its response to RR-011.53 of PDA-008, that the height of the cable protection above the seabed may be altered in relation to the given water depth at any point along the export cable corridor in order to adhere to the commitment, ensuring that any cable protection is sufficiently low profile to cause minimal changes to wave, tide and sediment transport. Thus, implicitly, the detailed design (either by location, installation methodology or type of cable protection) will ensure there are no significant impacts and, therefore, no alteration to the existing beach profile change, erosion of the backshore and short-term beach draw-down during storms. However, further detailed onshore and offshore geotechnical investigations will be conducted at the landfall, including establishing the depth of burial requirements to avoid the risk of exposure. Details of the final design will be included within the final Landfall Construction Method Statement submitted to the relevant planning authority for approval in consultation with NRW as secured in Schedule 2, Requirement 9(2) of the draft DCO (C1 Draft Development Consent Order F04).
REP1-056.16	54. We retain our recommendation that consideration should be given to sandwave recovery monitoring.	The Applicant has noted that no significant effects on physical process receptors were predicted in Volume 2, Chapter 1: Physical processes (APP-053), and therefore, no specific monitoring is considered to be required to test the predictions of the EIA. However, in line with the Offshore in-principle monitoring plan (APP-201), monitoring will be undertaken to observe the effect of sediment transport and sediment transport pathways on cable burial. This is secured under condition 18 in Schedule 14 of the draft DCO (C1 Draft Development Consent Order F04).
REP1-056.17	Benthic Subtidal and Intertidal Ecology 55. Further clarity is required with respect to the Applicant's intention for cable protection in shallow water at the exit pits. No assessment of the potential impacts to the benthic and intertidal	Please refer to the Applicant's response to REP1-056.190.

Reference	Written Submission Comment	Applicant's response
	ecology, as a result of cable protection in the nearshore environment, has been made.	
REP1-056.18	56. NRW (A) are unable to advise on the need for monitoring provisions in respect of risk of exposure of landfall cables due to beach profile change, erosion of the backshore and short-term beach draw-down during storms until further assessment is undertaken.	Please refer to the Applicant's response to REP1-056.15.
REP1-056.19	57. We retain our recommendation that consideration should be given to sandwave recovery monitoring.	Please refer to the Applicant's response to REP1-056.16.
REP1-056.20	58. Due to the presence of the highly invasive seasquirt *Didemnun vexillum*, further specific management measures may be required in addition to standard biosecurity risk assessment protocols, if the Port of Holyhead is used for vessel berthing.	The measures to minimise the potential spread of invasive non-native species', which is secured under Schedule 14, Condition 18(1)(e)(vii) of the Draft DCO (C1 Draft Development Consent Order F04). It is expected that a marine biosecurity plan will also be secured within the standalone marine licence, as set out in the marine licence principles document (J9 F03). The marine biosecurity plan will consider the pathway risks associated with vessels once the construction and operation and maintenance ports have been identified and confirmed prior to construction. As outlined in Table 2.19 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054), specific measures will be adopted in the event that a high alert species is recorded (e.g. carpet sea squirt *Didemnum vexillum*).
REP1-056.21	Marine Water and Sediment Quality (MW&SQ) 59. NRW (A) is satisfied that most of its previous concerns relating to MW&SQ have been addressed.	The Applicant welcomes NRWs response.
REP1-056.22	60. However, we continue to advise that consideration should be given to the concerns noted above regarding the assessment of the nearshore environment from a physical processes and benthic ecology perspective.	Please refer to the Applicant's response to REP1-056.199.
REP1-056.23	61. We continue to advise that further assessment is required for the biological quality elements and supporting elements due to the proximity to sensitive habitats.	Please refer to the Applicant's response to REP1-056.206.
REP1-056.24	Water Framework Directive (WFD) Coastal and Transitional Bodies – Offshore Works	The Applicant welcomes NRW's response.

Reference	Written Submission Comment	Applicant's response
	62. We support the assessment conclusion that the proposed works will not cause deterioration to the water quality of either of the water bodies considered (North Wales coastal waterbody and Clwyd transitional waterbody), nor the individual elements of these water bodies, or impact the objectives of achieving Good Ecological Potential (GEP) and Good Ecological Status (GES).	
REP1-056.25	63. Adequate clarification has been provided for the screening decision to not include other waterbodies in consideration of impacts.	The Applicant welcomes NRW's response.
REP1-056.26	64. NRW (A) continue to advise that to ensure compliance with the WFD Regulations whilst assessing the impact of the proposed activity, the re-suspension or accidental release of chemical contaminants should be considered in waters out to 12 nautical miles from MHWS.	Please refer to the Applicant's response to REP1-056.202 and REP1-056.203.
REP1-056.27	Biodiversity Benefit and Green Infrastructure Statement 65. NRW (A) welcomes the Applicant's ongoing commitment to engage with us on biodiversity enhancement measures at an appropriate time.	This is noted and welcomed by the Applicant.
REP1-056.28	Decommissioning Offshore 66. It is NRW (A)'s position that offshore renewable projects should produce decommissioning plans that retain all decommissioning options (maintain, full removal and partial removal); the options can then be assessed and refined closer to the time of decommissioning itself in consultation with NRW.	Please refer to the Applicant's response to REP1-056.213.
REP1-056.29	Mitigation and Monitoring Schedule; Marine Licence Principles and the Development Consent Order (DCO) 67. There remain a number of inconsistencies between the Mitigation and Monitoring Schedule, the Marine Licence Principles and draft DCO that require review. Such discrepancies may result in confusion and uncertainty as to the extent of measures that may be secured in respective consents. We advise that the Applicant undertakes a full review of these documents so as to provide assurance that measures are appropriately captured. It is important that all relevant documents are consistent and contain accurate reference to all proposed mitigation, monitoring and plans as	An updated Mitigation and Monitoring Schedule (Document Reference J10 F02) has been provided at Deadline 2 with updates made to ensure consistency across the documents, including the draft development consent order (Document Reference C1 F04).

Reference	Written Submission Comment	Applicant's response
	described in the application documents and agreed with interested parties.	
REP1-056.30	1.5 ONSHORE SUMMARY - Designated Landscapes 68. NRW (A) advises that the offshore works are likely to have numerous and extensive significant adverse effects on seascape, landscape and visual receptors within the Isle of Anglesey (IoA) National Landscape (NL), Eryri National Park (ENP), and within their settings. These significant adverse effects represent a substantial degree of harm to these designated landscapes which we consider to be in conflict with the purposes of NP and NL.	The Applicant has provided a detailed response to each of NRW's written representation comments below. The Applicant notes that a number of the comments made by NRW in their written representation (REP1-056) are a repeat of their relevant representation (RR-011). Where the same comment has been made, the Applicant has referred to its previous response to NRW's relevant representation (PDA-011 and PDA-012). This section provides a summary response in relation to the following comments raised by NRW: • Effects on nationally designated landscapes • The Mona Array and adherence to good siting and design principles • The SLVIA methodology • The SLVIA photomontages and visualisations. **Offshore visibility** The SLVIA (Volume 2, Chapter 8: Seascape and visual resources (APP-060)) concludes that the Mona Array Area, in an area of open sea and at a distance of 29 km from the coast at its closest point, will not result in significant adverse effects on landscape, seascape and visual amenity within the Statutory Designated Landscapes (SDLs). This is due to the distance from the SDLs and the scale of the change in views resulting from the Mona Array Area. At the distances specified, only the closest wind turbines would be barely visible occupying a limited horizontal field of view. The sea plain offers few clues to help in judging how far away a particular point or element in the water lies. Distances are particularly difficult to judge when looking out to sea. **Siting and Design** The National Policy Statements (NPS EN-1 (DESNZ, 2024a) and NPS EN-3 (DESNZ, 2024b)) and the National Planning Policy Framework provide the highest degree of protection for statutorily designated areas such as National Parks (NP) and National Landscapes (NL) and there is a requirement for projects to be designed sensitively given the various siting, operational and other relevant constraints where projects may have an impact on a NL. For decision making, NPS EN-3 (DESNZ, 2024b) states

Reference	Written Submission Comment	Applicant's response
		that consent should not be refused solely on the ground of an adverse effect on seascape or visual amenity, unless an alternative layout can be reasonably proposed which would minimise any harm or, taking account of the sensitivity of the receptor(s) set out in NPS EN-1 (DESNZ, 2024a), the harmful effects are considered to outweigh the benefits of the scheme (paragraph 2.6.208). The Applicant's position is that the Mona Array Area would not affect the settings of the IoA NL and the Eryri NP, both individually and cumulatively. The Mona Array adheres to good design principles (White Consultants, 2009; which replicates DTI, 2005) in that it: • is located far away from the coastline/ landscape designations • is located in lower sensitivity seascape • avoids stacking effect • is set back from the existing/ consented offshore wind farms • avoids being visible in juxtaposition with sensitive views to headlands • avoids scale reference in views with small islands or coastal landform/ features • avoids filling framed views in between headlands. The shape and layout of the Mona Array Area means that the extent of the Mona Array Area boundary facing the coast would occupy only a limited field of view. In relation to coastal views the eye is always drawn to the distinctive coastal landform. It is considered that the open sea, with the Mona Array Area located at a distance of 29 km from the coast, can absorb the Mona Array Area. **SLVIA Methodology** The SLVIA methodology is derived from GLVIA3 (Landscape Institute, 2013). GLVIA3 does not promote the use of matrices, and the assessment of significance should be reasoned through professional judgement. The significance of effect matrix (see Table 8.15, Volume 2, Chapter 8: Seascape and visual resources (APP-060)) shows that a small magnitude of impact experienced by a high sensitivity receptor could result in a moderate effect, which can be considered as a significant effect, in some circumstances, each to be judged on a case by case basis. For the

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		purposes of the Mona SLVIA 'moderate' effects can be either significant or not significant, depending on the context of the resource or receptor. Regarding viewpoints, the SLVIA has applied high (or very high) sensitivity to all highly valued visual receptors. **Visualisations** The visual impact assessment has been supported by photomontages and wirelines having regard for the limitations associated with these as outlined in Volume 6, Annex 8.4: Seascape, landscape and visual resources impact assessment methodology (APP-104) and as reflected in Nature Scot Visual Representation of Wind Farms (2017), which states that photomontage production will usually be of most value for views within 20 km of a wind farm (Nature Scot (2017); page 33, paragraph 160).
REP1-056.31	Water Framework Directive (WFD) Compliance Assessment (Onshore works) 69. NRW (A) advises that the onshore aspects of the development involve works adjacent, within, or beneath a number of watercourses. The Onshore Crossing Schedule specifies the proposed crossing methods and while trenchless techniques (e.g., Horizontal Direct Drilling) are confirmed for seven crossings, all options are retained for two of the watercourses. We consider some of the methods, such as trenching (as part of the cable installation) and use of culverts (as part of the haul roads) may not be appropriate at some locations. We advise a geomorphological field survey is carried out to ascertain the local conditions at each site and thereby determine the appropriate type of cable or haul road crossing required and demonstrate that there will not be impacts on fluvial geomorphology and WFD waterbodies.	The Applicant acknowledges that fluvial geomorphological survey data has yet to be presented for ordinary watercourses within the study area. The Applicant intends to collate a baseline of existing geomorphological information to be presented with a photographic record for the benefit of the Local Authorities and NRW. This will be provided to the Examination.
REP1-056.32	Air Quality 70. NRW (A) is satisfied that previous comments relating to air quality have been addressed. Requirement 9 of the Draft DCO requires the submission of final Management Plans and Method Statements to be approved by the discharging authority. We advise that we are satisfied with the Outline Code of Construction Practice (CoCP) in regards to air quality.	The Applicant notes that NRW is satisfied that previous comments in relation to air quality have been addressed and that NRW is satisfied with content of the Outline Code of Construction Practice (CoCP) in regards to air quality.

Reference	Written Submission Comment	Applicant's response
REP1-056.33	Ecology (Terrestrial) 71. NRW (A) is satisfied that previous comments relating to ecology (terrestrial) have been addressed. The Outline Landscape Ecology and Management Plan (LEMP) identifies the principles of mitigation. The final LEMP will be approved by the discharging authority, in consultation with NRW (A). NRW (A) agrees with this approach. However, NRW (A) considers that amendments to the Outline LEMP should be made. These amendments are advised in order to ensure impacts on protected species are appropriately mitigated. We advise that we are satisfied with the Outline LEMP in regards to onshore ornithology, fish and designated sites. We also advise that we are satisfied with the Outline CoCP in regards to invasive non-native species and designated sites.	The Applicant notes that NRW is satisfied that previous comments in relation to ecology have been addressed. The Applicant has responded to the specific requests to update the Outline LEMP below (REP1-056.258 to REP1-056.259).
REP1-056.34	Water Quality (Surface Water and Groundwater) 72. NRW (A) is satisfied that previous comments relating to water quality (surface water and groundwater) have been addressed. Requirement 9 of the Draft DCO requires the submission of final Management Plans and Method Statements to be approved by the discharging authority. The final versions must be in accordance with the Outline versions currently submitted. We advise that amendments are made to the Outline CoCP to ensure that impacts on water quality (surface and ground water) are appropriately managed. We also advise that we are satisfied with the Outline CoCP in regards to air quality, invasive non-native species, designated sites, materials and waste.	The Applicant notes that NRW is satisfied that previous comments in relation to water quality have been addressed. The Applicant has responded to the specific requests to update to outline documents below (REP1-056.264 to REP1-056.267).
REP1-056.35	Flood Risk 73. NRW (A) is satisfied that previous comments relating to flood risk have been addressed, and we have no further flood risk concerns with the proposed development. NRW (A)'s advice on flood risk is associated with that risk posed from the Sea and Rivers as shown on the Flood Map for Planning (FMfP). Since the implementation of the Floods and Water Management Act 2010 in Wales, it is the local authorities acting as the Lead Local Flood Authority (LLFA), who manage flooding from ordinary watercourses, surface water (and ground water).	The Applicant notes that NRW is satisfied that previous comments in relation to flood risk have been addressed. The Applicant is committed to engaging with the LLFA's regarding flood risk through the examination.

Reference	Written Submission Comment	Applicant's response
REP1-056.36	Material and Waste 74. Requirement 9 of the Draft DCO requires the submission of final Management Plans and Method Statements to be approved by the discharging authority. We advise that we are satisfied with the Outline CoCP in regards to material and waste.	The Applicant notes that NRW is satisfied that previous comments in relation to material and waste have been addressed and that NRW is satisfied with content of the Outline Code of Construction Practice (CoCP) in regards to material and waste.
REP1-056.37	1.6 MARINE LICENSING SUMMARY 75. NRW MLT have outstanding concerns surrounding the drafting of the deemed Marine Licence (dML). These concerns relate (but are not limited) provisions relating to the transfer of the marine licence, pre-commencement works, and; approval of plans. A number of drafting comments have been provided within the Written Representation, and NRW MLT continues to advise the Applicant on the drafting of the deemed Marine Licence.	The Applicant continues to engage with NRW MLT regarding the dML drafting. Responses to the specific drafting points have been addressed in the relevant sections below (see responses to REP1-056.281 to REP1-056.318) and updates made to the draft development consent order (in particular Schedule 14 – Document Reference C1 F04) as applicable.
REP1-056.38	76. In addition to the dML in respect of the Generation Assets, a separate Marine Licence application in respect of the Transmission assets has been submitted to NRW MLT and is currently under determination.	The Applicant notes NRW's comment.
REP1-056.39	2.1 Marine Ornithology 77. This section of our Written Representation covers issues relating to marine ornithology associated with the offshore and intertidal elements of the Mona application.	The Applicant notes NRW's comment.
REP1-056.40	78. Following a review of the environmental material submitted by the Applicant, in our Relevant Representations, NRW (A) identified the key issues as: • Lack of confidence in assessments due to errors and inconsistencies in information presented; • Lack of appropriate quantitative assessments for features of Pen y Gogarth / Great Orme's Head Site of Special Scientific Interest (SSSI); • Methods used in apportionment of impacts to designated sites, including age-class apportioning, non-breeding season impact apportioning, sabbaticals; • Lack of assessment of apportioned displacement impacts to designated sites covering the range of Statutory Nature Conservation Body (SNCB) advised displacement and mortality	The Applicant notes NRW's comments and has responded to specific points raised below.

Reference	Written Submission Comment	Applicant's response
	rates; • Data gaps in cumulative (and in-combination) assessments; • Errors in data included for other projects in cumulative and hence in-combination assessments. This Written Representation sets out more detail on these issues and any updates to the issues identified above since submission of the Relevant Representations.	
REP1-056.41	2.1.1 EIA Related Issues 2.1.1.1 Lack of confidence in assessments due to inconsistencies and potential errors in information 79. In our Relevant Representations [RR-011], NRW (A) raised concerns as there appeared to be many inconsistencies and possible errors in the information provided throughout the offshore ornithology assessment submission documents, which led to a lack of confidence in the predicted impacts both at EIA and HRA scale. The Applicant has provided responses to the inconsistencies and possible errors in the information identified by NRW (A) in their response to our Relevant Representations [PDA-008]. We welcome these responses and note the comments below on the issues noted by the Applicant.	The Applicant notes NRW's comment and has responded to specific points raised below.
REP1-056.42	2.1.1.1.1 Discrepancies between seasonal definitions presented across the documents (Applicant response reference to RR-011.3 in PDA-008) 80. In PDA-008, the Applicant has noted the discrepancies regarding the non-breeding season definition for puffin and the post breeding/autumn migration season definition for Manx shearwater in Table 5.14 in Volume 2, Chapter 5: Offshore ornithology [APP-057]. We welcome the commitment from the Applicant in PDA-008 that these corrections will be included in the Errata Document the Applicant will submit at Deadline 1 and we will review this document once submitted. Whilst the Applicant states in PDA-008 that these discrepancies do not alter the impact assessments as the correct numbers have been used, we note that there are errors in the seasonal abundance figures presented for these species for these seasons, as detailed in Section 2.1.1.1.3 below, which could impact the seasonal abundance figures used in apportionment to designated sites for HRA. Additionally, the correct figures should	Please see the Applicant's response to REP1-056.3. The Applicant can confirm that discrepancies in the seasonal definitions and abundances for Atlantic puffin and Manx Shearwater have been corrected in updates to Volume 2, Chapter 5: Offshore Ornithology (F.2.5 F02), Volume 2, Annex 5.2: Offshore Ornithology Displacement Technical Report (F6.5.2 F02), Volume 2, Annex 5.6: Offshore Ornithology Population Viability Analysis Technical Report (F6.5.6 F02), HRA Stage 1 Screening Report (E1.4 F02) and the HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02) submitted at Deadline 2. The Applicant can confirm that the amendments to the application documents outlined above do not alter the conclusions presented in Volume 2, Chapter 5: Offshore ornithology (APP-057) and the HRA Stage 2 Part Three: Special Protection Areas and Ramsar sites Assessments (APP-033).

Reference	Written Submission Comment	Applicant's response
	be made available for use by future projects that include the Mona project in the cumulative/in-combination assessments.	
REP1-056.43	81. Additionally, the Applicant has confirmed in PDA-008 that different seasonal definitions have been used for gannet and kittiwake for displacement and collision assessments. This is because the Applicant has considered that some months are split between two seasons for collision risk. This is as collision mortality estimates are calculated for each month in the collision risk modelling, and as monthly estimates are subsequently added together, it is therefore possible to halve a monthly collision mortality estimate to calculate the seasonal collision mortality estimate. The Applicant has considered the following months to be split across seasons for collision assessment for the following: • Gannet: half of March is defined as the pre-breeding/spring migration season with the second half of March falling in the breeding season and half of September falling in the breeding season and the other half falling in the post-breeding/autumn migration. • Kittiwake: half of April is defined as the pre-breeding/spring migration season with the second half of April falling in the breeding season and half of August falling in the breeding season and the other half falling in the post-breeding/autumn migration. We agree with the Applicant (as set out in PDA-008) that as the displacement matrix assessment approach uses mean seasonal peaks it is not possible to split abundance data for a month between seasons.	The Applicant notes NRW's comment and has responded to specific comments about black-legged kittiwake and northern gannet monthly collision impacts across seasons in REP1-056.44 to REP1-056.46. The Applicant welcomes NRW's agreement on the approach taken for the kittiwake and gannet displacement assessments presented in Volume 2, Annex 5.2: Offshore Ornithology Displacement Technical Report (F6.5.2 F02).
REP1-056.44	We note that the approach of splitting monthly collision impacts across two different seasons was not discussed during the Expert Working Groups (EWGs). Should this have been discussed, we would not have advised this approach. We advise that the standard approach is to use the full breeding season to define the breeding season, and where there is then overlap of months considered in both the full breeding season and the non-breeding seasons (e.g. with autumn and spring migration seasons) the non-breeding periods should be adjusted accordingly. This can be informed by the information presented in Furness	The Applicant notes NRW's comment and acknowledges that the approach described by NRW (i.e. using the full breeding season as defined by Furness (2015) and adjusting the non-breeding season where necessary to avoid any overlap of months) should have been undertaken for the assessment of collision impacts presented in the application. For collision impacts (including for northern gannet, black-legged kittiwake and fulmar, which are the examples given by NRW), Volume 2, Chapter 5: Offshore ornithology (F2.5 F02), Volume 2, Annex 5.6: Offshore Ornithology Population Viability Analysis Technical Report (F6.5.6 F02), HRA Stage 1 Screening Report (E1.4 F02) and the HRA Stage 2 ISAA Part Three: SPAs

Reference	Written Submission Comment	Applicant's response
	(2015). It is also unclear why the months above have been split across seasons for gannet or kittiwake, as from Table 5.14 of the Offshore Ornithology Chapter [APP-057], the seasonal definitions for these two species do not have any months where part falls in one season and another in another season – Table 5.14 of APP-057 lists the following: • Gannet: pre-breeding/spring migration = December-February, breeding = March-September, post-breeding/autumn migration = October-November • Kittiwake: pre-breeding/spring migration = January-March, breeding = April-August, post-breeding/autumn migration = September-December	and Ramsar sites Assessments (E1.3 F02) have been updated to include the corrected seasonal definition and abundances and submitted at Deadline 2. Please see the Schedule of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) submitted at Deadline 2 for further information. The Applicant acknowledges NRW's view on undertaking a displacement assessment for kittiwake. This has been provided at the request of the Joint Nature Conservation Committee during the second offshore ornithology EWG (section D.3 of the Technical Engagement Plan Appendices - Part 1 (A to E) (APP-042)). The Applicant can confirm that the collision and displacement impacts for black-legged kittiwake have been presented separately in Volume 2, Chapter 5: Offshore ornithology (F2.5 F02), and HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02). However, within the HRA Stage 1 Screening Report (E1.4 F02), a combined impact is used for black-legged kittiwake so that a site will be screened in on a more precautionary impact. The SNCBs agree that northern gannets are susceptible to both collision and displacement and that collision estimates should be adjusted for macro avoidance (Joint SNCB, 2024). This approach is taken in the HRA Stage 1 Screening Report (E1.4 F02) and HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02). Collisions and displacement are presented separately for northern gannets in Volume 2, Chapter 5: Offshore ornithology (F2.5 F02). The Applicant can confirm that the amendments to the application documents outlined above do not alter the conclusions presented.
REP1-056.45	Gannet: Given that Furness (2015) defines the full breeding season for gannet as March-September, we advise this definition is used, and then adjust the non-breeding season definitions in Furness (2015) accordingly as per the standard approach set out above. This then ensures no months are considered in two seasons and hence impacts accounted for twice. This approach fits with the gannet seasonal definitions as presented by the Applicant in Table 5.14 of APP-057 and with those used by the Applicant in the gannet displacement assessment. Therefore, we suggest that the Applicant uses the same seasonal definitions for gannet collision assessment as well. Furthermore, we advise that the seasonal EIA scale collision figures for gannet are updated to account for this, and that the same seasonal definitions and collision predictions are also used in seasonal apportioning to designated sites for gannet.	
REP1-056.46	Kittiwake: Furness (2015) defines the full breeding season for kittiwake as March-August. We advise this definition is used and then adjust the non-breeding season definitions in Furness (2015) accordingly to ensure no months are considered in two seasons. Therefore, we advise the Applicant reconsiders its EIA seasonal collision predictions for kittiwake and hence any apportioned collision impacts to designated sites. NRW (A) does not recommend that displacement is assessed for kittiwake as we currently consider the evidence base to be insufficient (as advised to the Applicant at Preliminary Environmental Information Report (PEIR) stage). Hence, we have not provided advice/comment on	

Reference	Written Submission Comment	Applicant's response
	the displacement aspect of the kittiwake assessment, and we recommend that impacts to kittiwake (at EIA and to Welsh designated sites at least) are presented for collision and displacement separately, rather than just the single combined total of collision and displacement. We again recommend that the impacts of gannet collision and displacement are also presented separately, as well as the combined impact of both, in order for the assessment and impact process to be fully followed. Additionally, it will be possible to see the level of contribution to the overall predicted impact due to collision and displacement separately if this method is applied.	
REP1-056.47	We are unclear how fulmar seasonal totals have been considered. From Table 5.14 of the Offshore Ornithology Chapter [APP-057] it appears that January-March are being considered within both the spring migration and breeding season definitions. We advise that monthly impacts should not be considered twice (i.e. in multiple seasons) and recommend that the standard advice above is taken, i.e. to use the full breeding season definition from Furness (2015) and adjust any non-breeding season definitions accordingly to ensure no overlapping months in the seasonal definitions.	
REP1-056.48	2.1.1.1.2 Errors in seasonal collision totals (Applicant response reference to RR-011.4 in PDA-008) 86. In our Relevant Representations [RR-011], NRW (A) noted there were errors in seasonal collision totals presented in Section 5.7.5 of the Offshore Ornithology Chapter [APP-057] compared to the monthly collision estimates in the Collision Risk Modelling (CRM) Annex [APP-093] making up the seasonal definitions that are summed. In response to RR-011, the Applicant has noted that their approach of adding half of the months impact to each bio-season, when a bio-season starts/finishes mid-month, was not explicitly stated within the application [see PDA-008]. Following this information, NRW (A) understand this to be the reason for the apparent errors for gannet and kittiwake at least. We refer the ExA to comments and advice in Section 2.1.1.1 above regarding the approach for these two species.	Please see the Applicant's response to REP1-056.44 to REP1-056.47. The Applicant has amended the seasonal collision estimates in an update to Volume 2, Chapter 5: Offshore ornithology (F2.5 F02), Volume 2, Annex 5.6: Offshore Ornithology Population Viability Analysis Technical Report (F6.5.6 F02), HRA Stage 1 Screening Report (E1.4 F02); and HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02) submitted at Deadline 2. The Applicant can confirm that the amendments to the application documents outlined above do not alter the conclusions presented.

Reference	Written Submission Comment	Applicant's response
REP1-056.49	2.1.1.1.3 Errors/discrepancies in seasonal peak estimates (Applicant response reference to RR-011.5 in PDA-008) 87. In our Relevant Representations [RR-011], NRW (A) advised that the Applicant check the seasonal abundances of puffin and Manx shearwater within the array plus 2km buffer area presented and used in the assessments for various seasons.	Please see the Applicant's response to REP1-056.42.
REP1-056.50	88. We welcome that the Applicant has acknowledged the error in the puffin non-breeding season figure and agree that this should be 22 and not 0 as previously presented. Whilst we agree with the Applicant that this error would not alter the conclusion of negligible significance for displacement from the project alone for this receptor as provided in the Offshore Ornithology Chapter [APP-057], we consider that the correct seasonal abundance figure should be included in the assessment and we welcome the commitment from the Applicant in [PDA-008] that this will be included in the Errata document the Applicant will submit at Deadline 1. We also recommend that this error is corrected in the figures included for the Mona project in the puffin cumulative displacement assessments (in the Offshore Ornithology Chapter [APP-057]) and that the error should be corrected in any apportioned impacts in the HRA Stage 1 Likely Significant Effect (LSE) screening report, and any need for subsequent Appropriate Assessment be updated accordingly. This is in order to ensure that the most appropriate apportioned figures for such sites for the Mona project are readily available for future projects to include the Mona figures in their in-combination assessments going forwards.	These discrepancies were identified in NRW's Relevant Representation (RR-011) and, in response, included in the Errata Sheet (REP1-044) submitted by the Applicant at Deadline 1. In accordance with paragraph 1.1.1.4 of the Errata Sheet (REP1-044), Volume 2, Chapter 5: Offshore ornithology (F2.5 F02), Volume 2, Annex 5.2: Offshore Ornithology Displacement Technical Report (F6.5.2 F02) and HRA Stage 1 Screening Report (E1.4 F02) have been updated with the corrected non-breeding figures for puffin and submitted at Deadline 2. The Applicant can confirm that the amendments to the application documents outlined above do not alter the conclusions presented.
REP1-056.51	89. In their response to our Relevant Representations [PDA-008], the Applicant acknowledges the small discrepancy in the spring migration mean peak abundance of Manx shearwater in the array area plus buffer. However, the Applicant considers that there is no issue with the autumn migration season peak of 182 Manx shearwaters. We suggest that the Applicant reconsiders this, as we note that the Applicant has confirmed in PDA-008 that the definition for Manx shearwater post-breeding/autumn migration season is September-October and hence, August is considered as in the breeding season. However, it appears that the abundance figures	These discrepancies were identified in NRW's Relevant Representation (RR-011) and, in response, included in the Errata Sheet (REP1-044) submitted by the Applicant at Deadline 1. In accordance with paragraph 1.1.1.4 of the Errata Sheet (REP1-044), Volume 2, Chapter 5: Offshore ornithology (F2.5 F02), Volume 2, Annex 5.2: Offshore Ornithology Displacement Technical Report (F6.5.2 F02), HRA Stage 1 Screening Report (E1.4 F02) and the HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02) have been updated with the corrected seasonal mean peak numbers of Manx

Reference	Written Submission Comment	Applicant's response
	for August have been considered by the Applicant in their calculations of mean peak abundance in the autumn migration period. Based on the Applicant's principle of using MRSea1 (model-based) estimates where available, and design-based if not, and an autumn definition of September-October, the peak autumn migration abundance in the site + 2km buffer should be 25 for year 1 (design-based estimate as MRSea estimate not available for either month) and 1 for year 2 (MRSea estimate), resulting in a mean peak estimate of 13 and not 182 as currently given (see Table 1.46 of Offshore Ornithology Baseline Characterisation Technical Report, APP-091). We therefore suggest that the Applicant should update the assessment with the correct seasonal mean peak numbers in order for future projects to include the most appropriate figures for the Mona project in cumulative/in-combination assessments. We assume that this error has also then fed through to the figures included for the Mona project in the Manx shearwater cumulative displacement assessments in the ES Offshore Ornithology Chapter [APP-057] and will also have implications for apportioned impacts, the HRA Stage 1 LSE screening and any need for subsequent Appropriate Assessment (AA) - which should also be checked and updated if required by the Applicant. This is again in order to ensure the most appropriate figures for the Mona project alone are readily available for future projects to include in their cumulative/in-combination assessments going forwards.	shearwater (spring migration and autumn migration) and submitted at Deadline 2. The Applicant can confirm that the amendments to the application documents outlined above do not alter the conclusions presented.
REP1-056.52	2.1.1.1.4 Other errors/inconsistencies in seasonal peak estimates identified by the Applicant (Applicant response reference to RR-011.6 in PDA-008) 90. We welcome that the Applicant has undertaken detailed checks of the tables of seasonal definitions, seasonal mean peak abundances for displacement, seasonal collision totals etc., presented throughout the various offshore ornithology documents as suggested by NRW (A) in our Relevant Representations. We note that the Applicant has identified some further inconsistencies and intends to include corrections in the Errata document the Applicant plans to submit at Deadline 1. Given the number of errors, whilst it may well be the case that correcting these will not	The Applicant welcomes NRW's comment and can confirm that the following documents have been updated and submitted at Deadline 2 to address relevant errata identified in the Errata Sheet (REP1-044). • Volume 2, Chapter 5: Offshore ornithology (F2.5 F02), • Volume 2, Annex 5.2: Offshore Ornithology Displacement Technical Report (F6.5.2 F02) • Volume 2, Annex 5.3: Offshore Ornithology Collision Risk Modelling Technical Report (F6.5.3 F02) • Volume 2, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02)

Reference	Written Submission Comment	Applicant's response
	alter the conclusions of the assessments, we would suggest that before the end of the examination the Applicant considers submitting a full updated and revised version of the Offshore Ornithology ES Chapter, Stage 1 HRA Screening for offshore ornithology and HRA Stage 2 ISSA Part 3 (SPAs and Ramsars) in order to ensure the most appropriate figures for the Mona project alone are readily and easily accessible for future projects to access for inclusion of the Mona project figures in future cumulative/in-combination assessments.	• Volume 2, Annex 5.6: Offshore Ornithology Population Viability Analysis Technical Report (F6.5.6 F02) • HRA Stage 1 Screening Report (E1.4 F02); • HRA Stage 2 ISAA for SPAs and Ramsar sites Assessments (E1.3 F02); and • HRA Integrity Matrices (E1.5 F02). The Applicant can confirm that the amendments to the application documents outlined above do not alter the conclusions presented. The Applicant refers NRW to the Schedule of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) for further information on specific changes to the updated application documents outlined above and submitted at Deadline 2.
REP1-056.53	2.1.1.2 Impacts to Sites of Special Scientific Interest (SSSI) (Applicant response reference to RR-011.7 in PDA-008) 91. In our Relevant Representations [RR-011], NRW (A) highlighted that as the Mona project is located within foraging range of the guillemot, razorbill and kittiwake features of the Pen-y-Gogarth / Great Orme's Head SSSI there was a need for the Applicant to present a full quantitative assessment of impacts from the proposed project on these features of the site. Whilst in paragraph 5.7.2.106 of the Offshore Ornithology Chapter [APP-057] the Applicant makes reference to a PVA (presented in APP-096) and hence assessment of operational displacement for the guillemot feature of the site, as noted in our Relevant Representations, the assessment is unclear. Additionally, no quantitative assessment was made in the submission of impacts to the razorbill (displacement) or kittiwake (collision) features of this site. Therefore, the Applicant has not carried out assessment of potential impacts to this site sufficiently in order to enable the effects on the features of the site to be assessed.	Please see the Applicant's response to REP1-056.2.
REP1-056.54	92. The proposed location for the Mona array area is approximately 29.8km from Pen-y-Gogarth / Great Ormes Head Site SSSI (Figure 1 in NRW WR). The cliffs host a large colony of breeding seabirds,	The Applicant notes NRW's comment.

Reference	Written Submission Comment	Applicant's response
	and the site is designated for breeding kittiwake, guillemot and razorbill. This is the second largest kittiwake breeding colony in Wales and the largest in North Wales, supporting approximately 790 pairs (5-year mean of peak counts 2018-2022, excluding 2020 when no data were collected due to the COVID-19 pandemic). In addition, the site supports around 1,500 guillemots and 150 razorbills each year (figures also based on 5-year mean peak 2018-2022 excluding 2020).	
REP1-056.55	93. The assessment of displacement of the guillemot feature of the Pen-y-Gogarth / Great Orme's Head SSSI is currently unclear for the following reasons: • The assessment of apportioned impacts presented in APP-096 appears to be based on the breeding season only. As with Special Protection Areas (SPAs), annual impacts should be assessed, and hence there is a need to apportion impacts to this SSSI in the non-breeding season as well and to sum the seasonal impacts to assess an annual impact. We suggest the Applicant considers the approach taken by the Awel-y-Môr Applicant in their Deadline 3a submission: Deadline 3a assessment • The displacement matrix approach (as advised by SNCBs: SNCBs 2022) should be presented of the apportioned impacts, and, due to the uncertainty around specific displacement and mortality rates we advise that the assessment considers impacts across the full range of SNCB advised % displacement (30-70% for auks) and % mortality (1-10%) rates.	Please see the Applicant's response to REP1-056.2.
REP1-056.56	94. The survival and hence mortality rate used to calculate the baseline mortality and the proportion (%) of baseline mortality that the predicted impact equates to is not made clear in either the assessment in APP-057 or Tables 1.3 or 1.5 of APP-096. As noted in our Relevant Representations [RR-011], for a breeding colony such as this, we recommend that the adult survival rate (such as that in Horswill & Robinson 2015) is used to calculate the adult mortality rate. Therefore, we recommend that the guillemot assessment is updated taking into consideration the points raised above and to make all the information highlighted above clear, for example through a table that sets all this out per season and annually. Then if the final apportioned annual impact equates to 1%	The Applicant can confirm that the adult survival rates used within Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037) were taken from Horswill and Robinson (2015). This is stated within paragraph 1.3.1.8 for black-legged kittiwake and paragraph 1.3.3.8 for razorbill within the Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037). The Applicant confirms that the baseline mortality rate was not presented for common guillemot within the Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037) due to the assessment focussing on the non-breeding season only and what change could occur. As the predicted impact from the non-breeding season was between <0.1

Reference	Written Submission Comment	Applicant's response
	or greater of baseline mortality for the colony, further consideration should be given through an updated PVA.	and 0.4 birds (when considering the range of displacement and mortality scenarios from 30% displacement and 1% mortality to 70% displacement and 10% mortality) it was not deemed necessary to redo the population viability analysis (PVA) (presented in table 1.9 of Volume 6, Annex 5.5: Offshore Ornithology Population Viability Analysis Technical Report (F6.5.6 F02). Therefore, the baseline mortality of common guillemot was not presented within Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037). The Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037) was undertaken in accordance with the methodology presented in Volume 2, Chapter 5: Offshore Ornithology (F2.5 F02) (which determines whether or not PVA is required) and provides an annual assessment of the impact of the Mona Offshore Wind Project alone on black-legged kittiwake, razorbill and common guillemot from Pen y Gogarth/Great Orme's Head SSSI as requested by NRW.
REP1-056.57	95. The Applicant should also undertake full quantitative assessments of predicted impacts of displacement of the razorbill and collision of the kittiwake features of the Pen-y-Gogarth / Great Orme's Head SSSI taking into account our comments above on the guillemot assessment. In addition, kittiwake collision assessments should be based on the stochastic collision risk model (sCRM) as used by the Applicant for their other collision assessments and use the kittiwake specific input parameters as provided by NE (and agreed by NRW (A)) during the EWG, including use of the species-group avoidance rate advised for kittiwake (i.e. the all gull rate of 0.9928 ± 0.0003). We again suggest that the Applicant considers the approach taken by the Awel-y-Môr Applicant in their Deadline 3a submission: Deadline 3a assessment. Again, if apportioned impacts equate to 1% or greater of baseline mortality then further consideration should be given through an updated PVA. If this is the case, NRW (A) can discuss and advise appropriate input parameters with the Applicant.	Please see the Applicant's response to REP1-056.2. As outlined in paragraph 1.2.1.1 of the Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037), the Applicant reviewed the approach taken by Awel y Môr to assess its impact on the Pen y Gogarth/Great Orme's Head SSSI (RWE, 2022) and does not consider it to be appropriate to present a population viability analysis (PVA) without first assessing whether this level of assessment is necessary (i.e. the project is predicted to result in a sufficient increase in baseline mortality to warrant further assessment). Therefore, in accordance with the assessment methodology presented in Volume 2, Chapter 5: Offshore Ornithology (F.2.5 F02), the Applicant has first assessed whether the predicted impact of the Mona Offshore Wind would surpass the threshold for requiring further assessment using PVA (i.e. >1% increase in baseline mortality). As outlined in Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037), when using the Applicant's preferred displacement scenario (50% displacement and 1% mortality), the combined impact of displacement and disturbance and collision risk results in an increase in baseline mortality for black-legged kittiwake of 0.40% annually. This is a <1% increase, and therefore, in accordance with the assessment

Reference	Written Submission Comment	Applicant's response
		methodology presented in Volume 2, Chapter 5: Offshore Ornithology (F2.5 F02), a PVA has not been undertaken. The Applicant acknowledges that NRW advises against undertaking a displacement assessment for black-legged kittiwake. The Applicant can confirm that collisions alone are predicted to have an impact, which results in a <1% increase in baseline mortality. For razorbill, as outlined in Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037), given the predicted additional impact to birds from the Pen y Gogarth/Great Orme's Head SSSI is considered to be negligible and not detectable in the population when considering disturbance and displacement annually (<0.1 birds). Therefore, no PVA was required. For common guillemot, due to the negligible predicted additional impacts during the non-breeding season (<0.1 birds) outlined in Offshore Ornithology Assessment of Pen y Gogarth/Great Orme's Head SSSI (REP1-037) and the conclusions drawn from the PVA presented at application (table 1.9 of Volume 6, Annex 5.5: Offshore Ornithology Population Viability Analysis Technical Report (APP-096)), the marginal increase in adults birds impacted during the non-breeding season will not change the conclusion with respect to the population at the Pen y Gogarth/Great Orme's Head SSSI. Therefore, it was not considered necessary to repeat the PVA as there would be no change to the conclusion.
REP1-056.58	96. We welcome the commitment by the Applicant in their response to our Relevant Representations [PDA-008] to present a specific document on the impact on the Pen-y-Gogarth/Great Orme's Head Site SSSI year-round and note that the Applicant intends to submit this at Deadline 1. Once this note is submitted into the examination, will provide further advice. We suggest that the Applicant considers our advice provided in our Relevant Representations [RR-011] and also that set out below regarding apportioning (age classes and non-breeding season methods of apportionment of impacts) and % displacement and % mortality rates in this document. Should this work not be submitted and the Applicant does not follow the advice we have provided, then we will be unable to conclude / determine or rule out, as the	Please see the Applicant's response to REP1-056.2.

Reference	Written Submission Comment	Applicant's response
	case may be, the likely damage to the special features of Pen-y-Gogarth / Great Orme's Head SSSI.	
REP1-056.59	2.1.1.3 Cumulative (and in-combination) Assessments 2.1.1.3.1 Data gaps (Applicant response reference to RR-011.8 in PDA-008) 97. As noted by NRW (A) RR-011, the Applicant's cumulative (and in-combination) impact assessments contain numerous data gaps and cannot be considered comprehensive. This issue was raised as a concern by the SNCBs in PEIR responses and discussed during the EWGs. The SNCBs supplied bespoke advice to the Applicant (and other Round 4 Irish Sea projects) detailing a hierarchical method to 'gap-fill' the Irish Sea cumulative and in-combination assessments (see Section D.6.13 of Appendix D of Technical Engagement Plan APP-042). This approach was relatively basic, with acknowledged limitations but was designed to generate indicative estimates for currently unknown (zeroed) impacts. This would then enable more informed expert judgement to be made on the likelihood of adverse effects, and thus if further investigation by a more rigorous assessment was warranted.	The Applicant notes NRW's comment and agrees with NRW that data gaps associated with historic offshore wind projects are an aspect of cumulative impact assessments that would be best addressed at the strategic level (REP1-056.61) (i.e. by adherence to a consistent methodology published or endorsed by the relevant SNCBs). Nonetheless, in the absence of this, the Applicant has considered the advice of the statutory nature conservation bodies (SNCBs) to the Mona Offshore Wind Project regarding a hierarchal method to quantify impacts from historical offshore wind projects in the Irish Sea. In response to Section 42 comments on the Preliminary Environmental Information Report (PEIR) and the bespoke advice provided by the SNCBs (outlined in Section D.6.13 of Appendix D of Technical Engagement Plan (APP-042)), the Applicant updated the cumulative effects assessments (CEAs) and in-combination assessments ahead of application. The updates incorporated quantitative assessment information for historical projects where this was available from project documentation and presented in a useable format (e.g., provided a monthly breakdown of abundances or impacts). In the absence of quantitative assessment information for historical projects, a qualitative assessment using project-specific documentation was included in the CEAs presented in Volume 2, Chapter 5: Offshore ornithology (F2.5 F02) and the in-combination assessment presented in the HRA Stage 2 ISAA Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02). The Applicant maintains that the assessment approach presented in Volume 2, Chapter 5: Offshore ornithology (F2.5 F02) and the in-combination assessment of the HRA Stage 2 ISAA Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02) is robust and includes sufficient detail to conclude beyond reasonable scientific doubt no significant effects and no adverse effect on integrity from the Mona Offshore Wind Project alone and in-combination with other plans and projects. However, noting SNCBs concerns raised pre- and post-application with respect to the potential contribution of historical projects to the offshore ornithology CEAs and in-combination assessment for the Mona Offshore Wind Project, the Applicant has undertaken a 'gap-filling' exercise in
REP1-056.60	98. We note that in paragraph 5.7.15.9 of the Consultation Report [APP-037], the Applicant states that 'it does not consider it appropriate to estimate impacts for other projects and notes that there is no precedent for this type of exercise in the offshore wind industry to 'gap-fill' information from existing projects.' NRW (A) note that this is not quite the case, although previous 'gap-filling' exercises have focused on in-combination assessment of at-risk sites/species. E.g., Burbo Bank Extension, Walney Extension and Gwynt-y-Mor projects all quantified impacts using contemporary Collision Risk Modelling (CRM) techniques for lesser-black backed gull at historic offshore wind farms where appropriate impact estimates were not available to inform a robust in-combination assessment. Additionally, we highlight that NRW (A) advised the Round 4 plan-level HRA (undertaken by The Crown Estate) to undertake quantitative 'gap-filling' for historic projects: in our comments on the Round 4 draft RIAA, we said: "NRW (A) are happy that this cumulative assessment will include built and operational windfarms. Using the MERP or SeaMaST	

Reference	Written Submission Comment	Applicant's response
	modelled data, assessments could be made for those old windfarms that didn't do sufficient assessments in the past. Therefore, cumulative assessments of CRM and displacement could be assessed using this technique as it has been used for the Round 4 areas."	accordance with SNCBs advice (which is presented in Section D.6.13 of Appendix D of Technical Engagement Plan (APP-042)) to generate indicative estimates for currently unquantified impacts from historical projects. This information is intended to further facilitate the SNCB's understanding of the total quantitative cumulative and in-combination impact for offshore ornithology. The Applicant is currently engaging with the SNCBs on the results of the gap-filling exercise for the Mona Offshore Wind Project and anticipates being able to submit information with respect to this for examination at Deadline 3.
REP1-056.61	99. It is unfortunate that this advice was not adopted as we consider that this would be best tackled at the strategic level.	
REP1-056.62	100. Despite this, the Applicant's cumulative and in-combination assessments still do not quantitatively consider impacts from a number of relevant projects due to the acknowledged lack of data. Impacts specified as 'unknown' have been assessed qualitatively but are ultimately still treated as zero. This approach will inevitably underestimate impacts and sets a risky precedent for future development in the region. NRW (A) continue to judge this qualitative approach to be problematic, and hence consider it inappropriate to comment on the potential significance of cumulative (or in-combination) impacts presented at this stage.	
REP1-056.63	101. To increase confidence in the cumulative (and in-combination) assessments, the method previously provided to the Applicant remains our preferred approach. However, we do accept that for most assessments the legitimate risk of impact on integrity judgements is relatively low. Therefore, we suggest the Applicant could consider an alternative approach that essentially back calculates the total species-specific impact that would need to be estimated for all projects with no data for the 1% baseline mortality threshold to be reached. Information from sites with data can then be used to inform a judgement on the likelihood of the unknown project impacts being of the scale required for this threshold to be reached. We understand this is the approach that the Morecambe Generation Assets projects has taken in their application, which has recently been accepted by PINS (PINS doc ref: EN010121-000242-5.1.12 Chapter 12 Offshore Ornithology.pdf (planninginspectorate.gov.uk). NRW (A) have not yet conducted a complete technical review, but currently consider this approach to be a useful initial screening method. If by following this approach it does appear that the likelihood of the impacts are of the scale	Please see the Applicant's response to REP1-056.59 – REP1-056.62. The Applicant notes NRW's comment on the approach presented by the Morecambe Offshore Windfarm: Generation Assets project. As outlined in response to REP1-056.59 – REP1-056.62, the Applicant has already undertaken work to gap-fill historical projects in accordance with statutory nature conservation body (SNCB) advice presented within Section D.6.13 of Appendix D of Technical Engagement Plan (APP-042) and is in the process of consulting the SNCBs with respect to this. The Applicant does not deem it necessary to additionally consider the approach presented by the Morecambe Offshore Windfarm: Generation Assets project, especially given that NRW has not yet conducted a complete technical review of this. Furthermore, the approach that the Applicant has taken has been described by the SNCBs as "a more rigorous assessment" (see Section D.6.13 of Appendix D of Technical Engagement Plan (APP-042)) and is therefore considered to be more robust than the approach taken by the Morecambe Offshore Windfarm: Generation Assets project which NRW describes as an "initial screening method".

Reference	Written Submission Comment	Applicant's response
	required for this threshold to be reached, then a more rigorous consideration of impacts may be required. Indeed, the Applicant has recently contacted the relevant agencies to secure a date to discuss gap-filling approaches. We will update the ExA accordingly as this matter evolves and develops.	
REP1-056.64	2.1.1.3.2 Data included for other projects in cumulative assessments (Applicant response reference to RR-011.9 – RR-011.11 in PDA-008) 102. In our Relevant Representations [RR-011], NRW (A) highlighted a number of issues with the data/figures presented by the Applicant for other projects included in the cumulative impact assessments. In their response to our Relevant Representations [PDA-008], the Applicant has acknowledged the errors made with the figures included for the Erebus project and has committed to correcting these in an Errata document to be submitted at Deadline 1. We welcome this.	The Applicant notes NRW's comment. Please see the Applicant's response to REP1-056.3.
REP1-056.65	103. We have reassessed the cumulative displacement assessments presented in APP-057 following the Applicant's confirmation in PDA-008 that the underwater collision mortalities from wave/tidal projects have not been included in the displacement abundance calculations and have been added additionally to the predicted displacement mortalities. Following this, we can confirm that we agree with the Applicant's approach regarding this aspect.	The Applicant welcomes NRW's comment and confirmation that this matter is resolved.
REP1-056.66	104. We welcome the Applicant's clarification in PDA-008 that collision predictions have been corrected to the current advised avoidance rates and that the Applicant has provided information on how they have recalculated the collision figures for the new avoidance rates. As a result, we are content with the Applicant's approach regarding this issue.	The Applicant welcomes NRW's comment and confirmation that this matter is resolved.
REP1-056.67	105. We welcome that in PDA-008 the Applicant has confirmed that the collision figures included in the cumulative assessments for the Awel-y-Môr project are those for Band Option 3 – we assume these are just figures for large gulls and that the figures included for the other species are from Band Option 2. However, we note that the	The Applicant can confirm that for the assessments presented in Volume 2, Chapter 5: Offshore Ornithology (F2.5 F02) at application, the Awel y Môr impacts were taken as Band Option 3 for large gulls and that Band Option 2 was used for kittiwake and northern gannet.

Reference	Written Submission Comment	Applicant's response
	avoidance rates recommended for use by the Mona Applicant by NE/NRW (A)/JNCC are those for the 'basic' Band model (i.e. Options 1 and 2) and are not considered appropriate for use with the 'extended' model (i.e. Option 3). We note that at the time of the Awel y Môr examination SNCB advice would have been that the extended model (i.e. Option 3) could be used for large gulls using the avoidance rates advised for the extended model. However, we note that the advice provided to the Applicant in the EWG by NE regarding CRM parameters in July 2022 stated that they no longer accept use of the extended Band model (options 3 & 4) (see Section D.3.13 of Appendix D of Technical Engagement Plan APP-042). NRW (A) agree with NE's position. Therefore, we advise that if the Option 3 large gull collision predictions for Awel-y-Môr are included in the cumulative assessments, they should not be corrected to the currently advised avoidance rates. However, if the Option 2 figures for this project are included instead (which in light of current advice would be our preferred approach), then these could be corrected to the currently recommended avoidance rates.	However, in light of NRW's comments highlighting that correcting Band Option 3 outputs to the new avoidance rate is not appropriate, the Applicant has updated Awel y Môr impacts to use Band Option 2 figures within the updated version of Volume 2, Chapter 5: Offshore Ornithology (F2.5 F02) submitted at Deadline 2. The Applicant can confirm that the amendments to Volume 2, Chapter 5: Offshore Ornithology (F2.5 F02) do not alter the conclusions presented.
REP1-056.68	106. In the cumulative assessments in the Offshore Ornithology Chapter [APP-057], the Applicant had included figures from the PEIRs for the Morgan and Morecambe Generation Asset projects. As was noted in our Relevant Representations [RR-011], the PEIR figures for both of these projects were based on only 12 months of data and therefore, subject to change and have a degree of uncertainty associated with them. However, we note that the Morgan Generation Assets project and the Morecambe Generation Assets project applications have been submitted and accepted by PINS and hence the implications of these to the Mona project cumulative (and in-combination) assessments should be considered by the Applicant. Given that both the Mona project, the Morgan Generation Assets project and the Morecambe Generation Assets project will likely all be in examination (albeit at different stages) at the same time, and all three projects are located within the Irish Sea, there will be a need for all three projects to be assessing the same cumulative (and hence in-combination) total impacts. Therefore, we very much urge the three projects to work together collaboratively to ensure the assessments are consistent.	In accordance with section 3.4.9 of the Planning Inspectorate's advice note seventeen (Planning Inspectorate, 2019), the list of cumulative projects considered within the cumulative effects assessment for Mona Offshore Wind Project was finalised three months before submission of the Environmental Statement (on 21 November 2023). The assessments presented in the application have considered all reasonably foreseeable interactions based on project information available at the time of the assessment. For Morgan Offshore Wind Project and Morecambe Generation Assets Project, the most recent available data was limited to the first 12 months of their survey campaigns, as this was included in their Preliminary Environmental Impact Assessment (PEIR) which was the latest publicly available information at the point of application. The Applicant notes that since the Mona Offshore Wind Project's development consent order (DCO) application was accepted, the DCO applications for the Morgan Generation Assets and Morecambe Generation Assets Projects have been accepted for examination by the Planning Inspectorate. The Applicant is currently undertaking a review of new information for cumulative and in-combination projects and anticipates being able to provide further information at Deadline 3.

Reference	Written Submission Comment	Applicant's response
REP1-056.69	107. Additionally, since the Morgan Generation Assets application has been submitted to the Planning Inspectorate and reviewed by NRW (A), there appear to be several differences between the figures included by the Mona Applicant and those included by the Morgan Generation Assets project in their submission for the same operational projects in the cumulative assessments. NRW (A) are in the process of reviewing the Morecambe Generation Assets project application and as yet cannot confirm whether there are further differences in the numbers included for other projects in this project's cumulative assessment. However, given that all three projects will likely be in examination (albeit at different stages) at the same time, and all of the projects are located within the Irish Sea, we again note the need for all three projects to be assessing the same cumulative (and hence in-combination) total impacts and continue to suggest that the projects work together collaboratively to ensure the assessments are consistent.	Abundances and collision estimates used within Volume 2, Chapter 5: Offshore Ornithology (APP-057) for other projects were collectively agreed with the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets before submission of the Mona Offshore Wind Project development consent order application. However, the Applicant notes that since then, refinements were made to the data sources included in the Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets CEA and in-combination assessments that were not captured in the Mona Offshore Wind Project application. To facilitate alignment with Morgan Offshore Wind Project: Generation Assets and Morecambe Offshore Windfarm: Generation Assets, the Applicant has updated the relevant abundance and collision estimates for other projects within Volume 2, Chapter 5: Offshore ornithology (F.2.5 F02) submitted at Deadline 2. The Applicant can confirm that the amendments do not alter the conclusions presented.
REP1-056.70	2.1.2 HRA Related Issues 108. We reiterate our advice provided in our Relevant Representations [RR-011], and during the EWG discussions, on the approach to the HRA Screening of LSE taken by the Applicant, i.e. that the approach taken may be considered appropriate regarding the Mona project alone, but that this approach will not necessarily be appropriate for all offshore wind cases. Therefore, we advise future offshore wind projects discuss any proposed LSE screening approaches with NRW (A) well in advance of any proposed submission of an application.	The Applicant notes NRW's comment.
REP1-056.71	2.1.2.1 Lack of clarity in approach and presentation of apportioned impacts and assessment (Applicant response reference to RR-011.13 in PDA-008) 109. As noted in our Relevant Representations [RR-011], the Applicant's approach and presentation of apportionment of predicted impacts to designated sites, assessment and process of reaching the predicted impacts in the HRA Stage 1 Screening Report [APP-034] and HRA Stage 2 ISAA SPAs and Ramsars [APP-033] is difficult to follow and unclear in places. Whilst we welcome the worked example provided by the Applicant in PDA-	The Applicant notes NRW's comment and acknowledges that information which informs the HRA Stage 1 Screening Report (E1.4 F02) and the HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02) is presented in multiple documents. For clarity, the information and documents which support the aforementioned assessments include: • Seasonal abundances – Volume 6, Annex 5.2: Offshore Ornithology Displacement Technical Report (F6.5.2 F02)

Reference	Written Submission Comment	Applicant's response
	008 for great black-backed gull at the Isles of Scilly SPA, we advise the Applicant considers our comments below regarding aspects of the assessment (including age class apportionment, calculation of non-breeding season apportionment proportions etc) and we strongly recommend that tables are provided for each designated site and feature that contain information on the following for the Mona project alone: • Seasonal abundance (for displacement assessments) and/or collision predictions at EIA scale for birds of all ages and then apportioned to adults (noting comments below). • Apportioned % or weighting per season for the colony in question (noting comments below) and resulting seasonal apportioned number of adults. • Apportioned seasonal and summed annual predicted impacts for each species feature for the site/colony in question. • Adult mortality rate for the species feature considered. • Colony size (breeding adults) and date of count. • Baseline mortality rate for colony (based on adult mortality rate and colony size). • Proportion of baseline mortality that the annual predicted apportioned impact equates to, should be provided for the SNCB advised range of % displacement and % mortality rates and range of predicted collisions from the sCRM tool for the SNCB advised input parameters.	• Apportioned weighting - Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) • Apportioned annual impact – HRA Stage 1 Screening Report (E1.4 F02) • Colony size - Volume 6, Annex 5.5: Offshore Ornithology Apportioning Report Technical Report (F6.5.5 F02) • Baseline mortality – Volume 2, Chapter 5: Offshore Ornithology (F2.5 F02) • Predicted baseline mortality impact – HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02) Several of these documents have been updated at Deadline 2 to account for errata identified in the Errata Sheet (REP1-044) at Deadline 1 and any further discrepancies considered to be errata identified in NRW's and the Joint Nature Conservation Committee's Written Representations (REP1-056 and REP1-066/067). The Applicant can confirm that the amendments to the application documents outlined above do not alter the conclusions presented. As outlined in the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2, the Applicant intends to provide additional information in accordance with the advice provided by NRW and the JNCC within their Relevant Representations (RR-011 and RR-033, respectively) and Written Representations (REP1-056 and REP1-066/REP1-067, respectively) for examination at Deadline 3. This will include consideration of specific aspects of the assessment identified by NRW in REP1.056-71 to REP1-056.72. The Applicant intends to engage with both NRW and JNCC to seek further guidance on how best to present the information requested in order to provide additional clarity with respect to the Applicant's assessment approach.
REP1-056.72	110. This could be submitted as a clarification note into the examination, and through an updated HRA Stage 1 Screening report and HRA Stage 2 ISAA Part 3 (SPAs and Ramsars) report. This is to ensure that the most appropriate figures for the Mona project alone are readily and easily accessible for future projects to access for inclusion of the Mona project figures in future in-combination assessments. Ideally a final table of EIA and HRA scale figures for each species and site that any consent for the project gets based on should be made publicly available. Consented figures can then be accessed by future projects to ensure the appropriate figures can be added for the Mona project into future cumulative/in-combination assessments. Potentially this	

Reference	Written Submission Comment	Applicant's response
	could be to a central place, such as Marine Data Exchange (MDE) hosted by The Crown Estate.	
REP1-056.73	2.1.2.2 Qualifying features of designated sites (Applicant response to RR-011.14 in PDA-008) 111. We welcome the acknowledgement from the Applicant in PDA-008 that the errors in the qualifying features of the Skomer, Skokholm and seas off Pembrokeshire SPA will be listed correctly in the Errata document the Applicant plans to submit at Deadline 1. We advise that the errors will also need to be corrected in the HRA Stage 1 Screening report [APP-034], HRA Stage 2 ISSA Part 3 (SPAs and Ramsars) report [APP-033] and HRA Integrity Matrices [APP-035].	The Applicant confirms that the discrepancies in the qualifying features of the Skomer, Skokholm and seas off Pembrokeshire/Sgomer, Sgogwm a Moroedd Penfro SPA that were identified in NRW's Relevant Representation (RR-011) were included in the Errata Sheet (REP1-044) submitted at Deadline 1. These discrepancies have also been corrected in the updated HRA Stage 1 Screening Report (E1.4 F02), HRA Stage 2 ISAA for SPAs and Ramsar sites Assessments (E1.3 F02) and HRA Integrity Matrices (E1.5 F02) submitted at Deadline 2. The Applicant can confirm that the amendments to these application documents do not alter the conclusions presented.
REP1-056.74	2.1.2.3 Apportionment of impacts (age classes, methods for apportionment of impacts to designated sites, sabbaticals) 2.1.2.3.1 Age class apportionment: immatures (Applicant response reference REP-011.19 in PDA-008) 112. Since the submission of our Relevant Representations [RR-011], we welcome that the Applicant has confirmed in PDA-008 that the impacts apportioned to each SPA in the HRA Stage 1 Screening Report [APP-034] and HRA Stage 2 ISAA Part 3 (SPAs and Ramsars) [APP-033] are for adult birds only in both the breeding and non-breeding period. Based on the worked example for great black-backed gull at the Isles of Scilly SPA provided by the Applicant in their response to our Relevant Representations (see response reference RR-011.13 in PDA-008), it clearly shows that the proportion of immatures as presented in the Apportioning Technical Report [APP-095) have not been used in the calculations of impacts apportioned to designated sites. Therefore, we are uncertain as to the reason or value in the Applicant having presented this information as it has caused confusion over the methods taken. We suggest that this is clarified.	The Applicant confirms that the proportion of immatures presented in Volume 6, Annex 5.5: Offshore ornithology apportioning technical report F6.5.5 F02) have been presented for information only and have not been used in the assessment.
REP1-056.75	2.1.2.3.2 Age class apportionment: kittiwake in the breeding season (Applicant response reference to REP-011.15 in PDA-008) 113. In our Relevant Representations [RR-011], NRW (A) raised concerns regarding the appropriateness of the Applicant's use of the kittiwake adult proportion that was calculated for Hornsea 2.	The Applicant notes NRW's comment. As outlined in row RR-011.15 of the Applicant's Response to Relevant Representations (PDA-008), should the assessment have assumed 95.23% of birds in the breeding season (as suggested by NRW) were adults, only

Reference	Written Submission Comment	Applicant's response
	We note that this approach was not raised by the Applicant during EWG meetings or subsequently, and therefore NRW (A) has not agreed to this approach. The Hornsea 2 approach to apportioning to age class referred to in Paragraph 1.3.3.5 of the Applicant's Apportioning Technical Annex [APP-095] relies on reliable counts of first year birds, i.e. in the case of kittiwake first summer birds which by August of that year have largely transitioned to adult plumage and are indistinguishable from mature adults. Therefore, the identification rate of first summer kittiwake is questionable and calculations derived from this e.g. applying survival rates to define an age class structure, is also questionable. Additionally, the very low number of aged juvenile kittiwakes in the Mona site-specific surveys and that the juvenile survival rates (0-1 year) given in Horswill & Robinson (2015) are very old and from a single colony in the North Sea (taken from Coulson & White 1959) and hence have a poor data quality score (score of 1). These issues mean there is uncertainty around the appropriateness of the approach for use at the Mona site which is located in the Irish Sea. Therefore, we reiterate our advice from our Relevant Representations [RR-011] that a more appropriate approach for the breeding season would be to use the 95.23% of adults recorded in the Mona site-specific Digital Area Survey (hierarchDAS) data, or to take the same approach as for auks and Manx shearwater and assume all birds are adults.	one additional site (Wicklow Head SPA) would have been screened into the Stage 2 of the HRA and assessed within Step 1 (HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02)). The assessment presented in response to RR-011.15 for Wicklow Head SPA concludes no risk of an adverse effect on the integrity of Wicklow Head SPA from the Mona Offshore Wind Project alone. Thus, whether 87.66% and 95.23% of kittiwake during the breeding season are assumed to be adults does not impact the overall conclusions of the HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02). Following the update to the seasonal definitions of black-legged kittiwake (REP1-056.44) and to align how the breeding age-class apportioning has been undertaken for each species, the Applicant has updated the breeding season age-class apportioning for black-legged kittiwake to be based on site-specific data only within Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) at Deadline 2. This has led to subsequent updates in the HRA Stage 1 Screening Report (E1.4 F02) and HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02) which have also been provided at Deadline 2. The Applicant can confirm that the amendments to these application documents do not alter the conclusions presented.
REP1-056.76	114. We recommend that the Applicant also provides into the examination, impact assessments for all sites with kittiwake features following NRW (A)'s advised approach alongside the assessments using their approach, so that a fully informed judgement can be made.	
REP1-056.77	2.1.2.3.3 Non-breeding season apportionment of impacts, including age classes (Applicant response reference to RR-011.16 and RR-011.18) 115. The Applicant has used a theoretical generalised stable age structure (Furness 2015) to apportion impacts to adults in the non-breeding season from SPA colonies. As noted in our Relevant Representations [RR-011], we do not agree with this approach. This is because these are considered unlikely to be representative	The Applicant notes NRW's comment and considers that NRW has misinterpreted table 1.6 of Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02). The Applicant confirms that site-specific survey data (rather than stable age structure) has been used for both non-breeding and breeding birds within the assessments but recognises that the information provided with respect to this is unclear.

Reference	Written Submission Comment	Applicant's response
	of the actual proportions of adults present within specific areas at different times of year and could lead to over, or more importantly, underestimation of impacts.	Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) has been resubmitted at Deadline 2 with the following updates: • Amendments to the presentation of the apportioning method used during the non-breeding season. • Amendments so that the Applicant's approach to age-class apportioning is more clearly presented; and • Corrections to Table 1.4 to present the age-class apportioning percentages during the breeding and non-breeding season, which were applied in the HRA Stage 1 Screening Report (E1.4 F02). For species where age-class was not able to be confirmed during the digital area surveys, it is presumed that 100% of the birds were assumed to be adults during the breeding and non-breeding season within the assessment. Specifically for Manx shearwater, common guillemot and razorbill which cannot be aged accurately, this is in line with SNCB advice during the EWG03 (Technical Engagement Plan Appendices - Part 1 (A to E) (APP-042)). The Applicant refers NRW to the Schedule of Changes to the Offshore Ornithology EIA and HRA Documents (S_D2_7) for further information on specific changes made to Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) submitted at Deadline 2.
REP1-056.78	116. In their response to this in PDA-008 in reference to RR-011.16, the Applicant states that their approach 'has followed the approach used previously in the application for Development Consent for multiple offshore wind farms' and lists Outer Dowsing (2024) as an example. Whilst the Outer Dowsing Applicant may have taken this approach in their application, we note that NE in their Relevant Representations for this project2 have disagreed with the Applicant's approach and have advised that where good quality site-specific ageing data is not available, that the precautionary approach is used - that is to assume that all 'adult type' birds recorded on surveys (i.e. birds that cannot be distinguished from adults, and hence might be adults) are apportioned as adults (Natural England 2024).	
REP1-056.79	117. We also note that at Awel-y-Môr, whilst the Applicant there used the Furness (2015) stable age structure approach to age class apportioning, NRW (A) did not agree with the approach and in our Relevant Representations for this project (NRW (A) 2022) stated: 'NRW (A) notes that the Furness (2015) stable age structure assessment method has been applied. Whilst NRW (A) would have preferred that stable age structure is calculated from the local surveys, or, by adopting a precautionary approach by counting all birds as adults, we do not consider that this impacts the final assessments.'	
REP1-056.80	118. In their response to our Relevant Representations in PDA-008 (see response to reference RR-011.13), the Applicant has provided a worked example of their approach to apportioned impacts for collisions of great black-backed gull at Isles of Scilly SPA (age-class apportionment and apportionment to SPA). This shows that the Applicant has taken the EIA scale all age class collision figure for the non-breeding season and applied an apportionment rate for proportion of adults (based on stable age structure from Furness 2015) and an apportionment rate for proportion of adult birds within the relevant seasonal Biologically Defined Minimum Population	The Applicant considers that NRW has misinterpreted the information presented in row RR-011.13 in the Applicant's Response to Relevant Representations (PDA-008), which is considered to be correct and does not double apportion adult birds. The Applicant would like to clarify that the adult birds from an SPA have been divided by the adult birds from the BDMPS and not from the total population of birds from the BDMPS as NRW suggests. Further clarification of the Applicant's approach using the same example as provided in row RR-011.13 in the Applicant's Response to Relevant

<table>
<tr><th>Reference</th><th>Written Submission Comment</th><th>Applicant's response</th></tr>
<tr><td></td><td>Scale (BDMPS). We note that this approach essentially double apportions to adults as the BDMPS proportions in the tables in Appendix A of Furness (2015) already takes account of the number of adults likely to be present in the BDMPS, so it is not appropriate to correct (a second time) for the proportions of adults (or adult type in the case of kittiwake) in the BDMPS. Therefore, we recommend that no age class apportionment is undertaken for the non-breeding season(s) and that the apportionment to designated sites for the non-breeding season(s) is undertaken based on the proportion of the SPA adult birds across the BDMPS total of birds of all ages for each relevant non-breeding BDMPS season. So, for example for gannet at Grassholm SPA in the Western Waters BDMPS in the post-breeding/autumn migration season:
• From Table 15 of Appendix A of Furness (2015) the number of Grassholm SPA adult birds in the BDMPS is 78,584 birds, whilst the total number of gannets of all ages across the BDMPS is 545,954 birds. Therefore, the proportion of Grassholm SPA adult birds across the BDMPS during autumn can be calculated as 0.1439 (14.39%).
• Therefore, the autumn migration apportioned collisions to the Grassholm SPA, should be: Mona EIA autumn collision total x 0.1439.</td><td>Representations (PDA-008) - great black-black gull from the Isles of Scilly SPA.
<table><tr><th>Step</th><th>Step Description</th><th>NRW approach</th><th>Applicant Approach</th></tr><tr><td>A</td><td>Number of adult birds from Isles of Scilly SPA in the BDMPS (Table 46 of Furness, 2015)</td><td>1,622</td><td>1,622</td></tr><tr><td>B</td><td>Number of adult birds in the UK South-west & Channel Waters (Table 46 of Furness, 2015)</td><td>5,622</td><td>5,622</td></tr><tr><td>C</td><td>Number of birds in the UK South-west & Channel Waters (Table 46 of Furness, 2015)</td><td>17,742</td><td>17,742</td></tr><tr><td>D</td><td>Percentage of adults birds from Isle of Scilly SPA in the total BDMSP population (A/C)</td><td>9.14%</td><td>N/A</td></tr><tr><td>E</td><td>Percentage of adults birds from Isle of Scilly SPA in the adult BDMSP population (A/B)</td><td>N/A</td><td>28.85%</td></tr></table>
If undertaking the approach set out by NRW, the percentage of adults within the whole population (step D) would require the use of the stable-age structure (which the Applicant notes the SNCBs do not recommend). However, taking the percentage of adults within the adult bird population (step E), the site-specific age-class structure can be used. The Applicant can confirm that the assessment approach presented in Volume 6, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) uses the method that allows the site-specific age-class structure to be used, as recommended by SNCBs. Please see the Applicant's response to REP1-056.77 to REP1-056.79 for further information regarding the Applicant's approach to non-breeding season apportionment of impacts.</td></tr>
<tr><td>REP1-056.81</td><td>119. We therefore recommend that the Applicant also provides into the examination, impact assessments for all designated sites following NRW (A)'s advised approach alongside the assessments using their approach.</td><td></td></tr>
</table>

Reference	Written Submission Comment	Applicant's response
REP1-056.82	2.1.2.3.4 Sabbaticals (Applicant response reference to RR-011.17 in PDA-008) 120. We welcome that the Applicant has confirmed in PDA-008 that sabbaticals have not been removed from the adult numbers. This is in line with the advice provided to the Applicant by NRW (A) (and NE/JNCC) during the EWG. This is because we do not consider the current evidence base sufficient to recommend sabbatical rates of >0 for any species (see details below). We acknowledge some birds do not breed every year, but the mean proportions of populations doing so are not well understood, nor are their behaviours or distributions in the breeding season.	The Applicant notes NRW's comments in REP1-056.83 to REP1-056.87 and refers NRW to row RR-033.27 of the Applicant's Response to Relevant Representations (PDA-008), where the matter of sabbatical birds is addressed. To reiterate, the Applicant can confirm that sabbatical birds have not been removed from any of the assessments presented within the application documents. The Applicant acknowledges that the inclusion of Table 1.7 in Volume 2, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) adds confusion. Volume 2, Annex 5.5: Offshore Ornithology Apportioning Technical Report (F6.5.5 F02) has been updated to remove Table 1.7.
REP1-056.83	121. Whilst the Applicant has confirmed that sabbaticals have not been removed from adult numbers, we do note that in paragraph 1.3.4.5 of APP-095 the Applicant states: 'Every breeding season a proportion of adults skip breeding and take a 'sabbatical'. To include any impacts occurring on any sabbatical birds within that apportioned to those individuals of the species breeding at a colony, would likely overestimate the effects to these species/populations (Marine Scotland 2017a, b).'	
REP1-056.84	122. NRW (A) does not agree with this statement and consider that review of the seabird demographic rates presented by Horswill & Robinson (2015) and the literature used to inform them introduces significant caution in any consideration of sabbaticals during impact assessment. This is because there are insufficient studies to inform a full understanding and no clear basis to extrapolate findings to other colonies. Additionally, it is uncertain that historic findings remain relevant now, or for the extended period (30 or more years) that offshore wind projects may impact populations.	
REP1-056.85	123. In paragraph 1.3.4.5 of APP-095 the Applicant claims: '….breeding colony population size estimates, which are used within the Environmental Impact Assessment and HRA Stage 2 ISAA (Document Reference APP-031) to inform the derivation of the significance of impacts, do not include these sabbatical birds……it is likely therefore that impacts assigned to breeding colonies will be an overestimate,….'.	

Reference	Written Submission Comment	Applicant's response
REP1-056.86	124. NRW (A) does not consider this statement to be evidence based and we remain unconvinced that seabirds are not attending colonies while taking sabbaticals from breeding, and therefore potentially being counted as part of the breeding population. Reed et al. (2015), reported that on the Isle of May (where the adopted sabbatical rate for guillemot was calculated) that: "Non-breeding guillemots spend much time in the colony near their last breeding site". Therefore, we consider that sabbatical guillemots may be represented in colony population estimates, especially given the methods employed to count auk colonies (individuals present in breeding habitat are counted, rather than apparently occupied nests/sites). Similarly, we consider it possible that gulls may attend colonies, and even attend or defend nest sites while taking a sabbatical. For example, Calladine and Harris (1997) found large numbers of Herring Gulls and Lesser Black-Backed Gulls residing in a breeding colony on the Isle of May, despite those individuals not breeding during the breeding season in question.	
REP1-056.87	125. Additionally, in Table 1.7 of APP-095 the Applicant presents sabbatical rates proposed by Marine Scotland in guidance supplied to Scottish offshore wind farms seven years ago. We note that these rates were specifically for consideration within a PVA model, not apportioning, and the use of these rates is not justified or evidenced in the cited document. Hence NRW (A) do not consider these sabbatical rates appropriate for consideration during apportioning.	
REP1-056.88	2.1.2.4 Apportioned impacts from the Mona project alone (Applicant response reference to RR-011.19 and RR-011.21 in PDA-008) 126. In our Relevant Representations [RR-011], NRW (A) noted that the apportioned impacts to designated sites from displacement and resulting % increases to baseline mortality considered in the Stage 1 HRA Screening Report [APP-034] and hence taken through the assessments in the HRA Stage 2 ISAA for SPAs and Ramsars [APP-033], are based on the Applicant's considered appropriate % displacement and % mortality rates only. The apportioned impacts for the full ranges of SNCB (NRW/NE/JNCC)	The Applicant acknowledges and welcomes NRW's thorough comments regarding evidence to support different displacement and mortality rate rates, specifically in relation to auks, Manx Shearwater and northern gannet. As set out in Volume 2, Chapter 5: Offshore Ornithology (F2.5 F02), the Applicant has used the full range of displacement and mortality rates advised by the SNCBs. The Applicant welcomes NRW's advice that "NRW (A) are not advising that the HRA be based solely on the upper end of the % displacement and % mortality rates advised (e.g. 70% displacement and 10% mortality for auks),

Reference	Written Submission Comment	Applicant's response
	advised % displacement and % mortality rates are not presented in the HRA Stage 1 Screening [APP-034] or HRA Stage 2 ISAA Part 3 (SPAs and Ramsars) [APP-033] reports.	but we are advising that in order to account for the large degree of uncertainty regarding displacement rates and effects that the assessments consider a range of potential rates and effects rather than focussing on a single figure as the Applicant has done in their HRA documents." As outlined in the Applicant's Response to the Examining Authority's Rule 17 Letter (S_D2_2) submitted at Deadline 2, the Applicant intends to provide additional information in accordance with the advice provided by NRW and the JNCC within their Relevant Representations (RR-011 and RR-033, respectively) and Written Representations (REP1-056 and REP1-066/REP1-067, respectively) for examination at Deadline 3. This will include presentation of displacement impacts apportioned to designated sites for the full range of displacement and mortality rates recommended by the SNCBs (including those outlined here in REP1-056.90 to REP1-056.101) to aid the SNCB's interpretation of the apportioned impacts on individual SPAs.
REP1-056.89	127. We acknowledge that the EIA scale full displacement matrices and predicted impacts for the full range of SNCB advised % displacement and % mortality rates are presented and assessed in Section 5.7.2 of the Offshore Ornithology Chapter [APP-057] and Section 1.4 of the Displacement Technical Report [APP-092], and that the EIA scale displacement matrices based on the upper and lower 95% confidence limits of the abundance data are presented in Appendix C of APP-092. However, the displacement impact figures apportioned to the designated sites for the SNCB advised ranges (e.g. 30-70% displacement and 1-10% mortality for auks), or the full matrices of apportioned impacts to each designated site, have not been provided by the Applicant anywhere in the submission documents or in the response to our Relevant Representations [PDA-008]. The only apportioned figures available are for the Applicant's preferred % displacement and % mortality for each species feature of: 50% displacement and 1% mortality for auks, Manx shearwater and kittiwake and, 70% displacement and 1% mortality for gannet. This should be rectified. Please see further detail below.	
REP1-056.90	2.1.2.4.1 Auk displacement rates 128. In paragraphs 5.7.2.14-5.7.2.16 of the Offshore Ornithology Chapter [APP-057], the Applicant presents evidence to justify its preferred rates of 50% displacement and 1% mortality across the site and 2km buffer, as being the most realistic rates to base the auk HRA assessments on. NRW (A) considers that the evidence for auk displacement is variable, with some studies finding a strong displacement effect of guillemots and razorbills from offshore wind farms, whereas other studies have found none. For example, displacement of guillemots and razorbills have been reported in the non-breeding season in the southern North Sea of distances from 2 to 4km (Petersen et al. 2004) and Petersen & Fox (2007) demonstrated the exclusion of guillemots out to at least 2km at Horns Rev development site. Mendel et al. (2014), studying the Alpha Ventus windfarm in Germany found that guillemot were in	

Reference	Written Submission Comment	Applicant's response
	significantly lower numbers in all distance bands from the windfarm (out to 6-10km), with the highest displacement within 2km of the windfarm (razorbill were not in sufficient numbers to assess). Welcker & Nehls (2016), also studying Alpha Ventus, found that auks (predominantly guillemot) were 75% lower inside compared to outside the windfarm and that the lower numbers were evident out to 2.5km of the windfarm. Welcker & Nehls (2016) also conducted a literature review of studies looking at displacement and concluded that there was strong evidence across studies that auks are displaced by offshore windfarms. However, this has not been the case for other studies, e.g. guillemots at Robin Rigg wind farm in Scotland (Vallejo et al. 2017) and a study by Webb et al. (2017) found no displacement or attraction occurred at the Lincs and LID wind farms for all auks. Dierschke et al. (2016) conducted a review (for full details see table 3 in the paper) and they concluded that common guillemot and razorbill 'weakly avoided' windfarms.	
REP1-056.91	129. We note that displacement of auks may be state-specific (breeding or non-breeding) or it may be due to habitat quality and/or availability (e.g. birds will be more easily displaced from poorer quality habitat or where habitat is not limiting). The Applicant's evidence in paragraph 5.7.2.14 of APP-057 notes that evidence for auk displacement is variable. We also note a recent study has highlighted the potential for displacement to occur over much greater distances (up to ~20km) than are typically assessed or considered by baseline characterisation surveys (Peschko et al. 2024). Therefore, our advice remains that consideration should be given to a range of displacement rates from 30%-70% across a 2km buffer and we strongly advise the Applicant provides apportioned impacts for relevant designated sites across this range.	
REP1-056.92	2.1.2.4.2 Manx shearwater displacement rates 130. The Applicant has not presented any evidence to justify a 50% displacement and 1% mortality rate as being appropriate evidence-based rates to use for Manx shearwater HRA displacement impact assessments. As was noted by NRW (A) in our response to actions from EWG3 (see Section D.4.3 of Appendix D of APP-042), there is currently no evidence for any particular range of displacement rates	

Reference	Written Submission Comment	Applicant's response
	(1-10%, 30-70% or any other) for this species from offshore wind farms. Therefore, we advise that the full displacement matrices for apportioned impacts to Manx shearwater designated sites are provided, or as a minimum the range of impacts across the same range of rates as per auks are provided (i.e. 30-70% displacement and 1-10% mortality). We strongly advise the Applicant provides apportioned impacts for relevant designated sites across this range and/or the full displacement matrices for apportioned impacts for each relevant designated site.	
REP1-056.93	2.1.2.4.3 Gannet displacement rates 131. With regard to the Applicant's chosen rates of 70% displacement and 1% mortality for use for gannet displacement assessment, we note that in paragraph 5.7.2.21 of the Offshore Ornithology Chapter [APP-057], the Applicant presents the evidence from Pavat et al. (2023) and Apem (2022) as justification for its chosen rates. Whilst the Apem (2022) report is not listed in the reference list of APP-057, we assume the Applicant is referring to the 'Gannet Displacement & Mortality Evidence Review' submitted during the Hornsea Project 4 examination3. If this is the case, the Apem (2022) review results in a conclusion that 40-60% displacement should be considered for gannet during the breeding season, and a 60-75% would be more appropriate during the non-breeding season. We note that of the seven studies reported in Apem (2022) suggesting displacement rates of less than 60%, the authors placed low confidence in the survey methods and/or data collected for five of these. We also note there is currently no empirical evidence for displacement consequent mortality of gannet and the studies quoted in Apem (2022) have significant limitations and numerous underlying assumptions limiting confidence in their conclusions. Therefore, based on the evidence, we do not consider that the Apem (2022) report provides sufficient justification for the use of different displacement and mortality rates to those advised by NRW (A).	
REP1-056.94	132. We note that the work by Pavat et al. (2023) was commissioned by NE and the aim of the work was to deliver an evidence-based method to ensure macro-avoidance behaviour is appropriately accounted for in collision risk models of gannet at	

Reference	Written Submission Comment	Applicant's response
	offshore wind farms. This work was not aimed at reviewing displacement rates for use in the displacement matrix. Displacement effects are an inherent part of macro-avoidance behaviour because macro-avoidance is a combination of both displacement and barrier effects. However, currently displacement and collision risk are performed as separate analyses and there are spatio-temporal mismatches in how displacement and collision mortalities are measured (Pavat et al. 2023). We note that in assessments macro avoidance applies only to birds in the array footprint in flight, whereas displacement applies to the buffer as well and to all birds (on the water plus in flight). NRW (A) agree with the advice provided by NE to the Applicant on 7th July 2022 regarding CRM parameters that to account for gannet macro avoidance by a reduction of density of birds in flight based on the level of macro avoidance displayed by this species, which was advised to be 70% (see Section D.3.13 of Appendix D of APP-042). However, we note that the displacement matrix approach uses mean seasonal peaks of all birds, whereas CRM uses monthly means of birds in flight. Hence the two things do not fit together, and we have no way of reconciling this at present.	
REP1-056.95	133. Therefore, NRW (A) recommend that a range of 60-80% displacement for gannet should be considered in the assessment (as was set out by the Applicant in their displacement technical note supplied to the EWG, see Section D.3.9 of Appendix D of APP-042). So, we strongly advise the Applicant provides apportioned impacts for relevant designated sites across this range of displacement and mortality rates.	
REP1-056.96	2.1.2.4.4 Mortality rates 134. We acknowledge that empirical evidence regarding the energetic consequences of displacement for seabirds and wintering waterbirds using the marine environment are very limited, and the role of overwinter survival on seabird population dynamics is poorly understood. Therefore, as there is very little information available about the consequences of displacement for individuals, there is actually no evidence to suggest that 10% is precautionary. Furthermore, we note that the mortality rates are a crude method of capturing a range of potentially deleterious effects that could arise	

Reference	Written Submission Comment	Applicant's response
	from displacement, including reduced fitness for migration and reduced productivity during the breeding season. These are particularly relevant when considering displacement effects within sites designated for the species affected.	
REP1-056.97	135. We note that the evidence for mortality rates cited by the Applicant in paragraph 5.7.2.12 of APP-057 (e.g. Van Kooten et al. 2019 and Searle et al. 2014; 2018) used individual based models (IBMs) to infer mortality rates and we highlight that in each case that was not the primary aim of the studies. The cited studies each suffer from data deficiencies that introduce significant uncertainty to any estimate of mortality rate arising from offshore windfarm displacement.	
REP1-056.98	136. Therefore, as there is very little information available about the consequences of displacement for individuals, we continue to advise that a range of mortality rates from 1-10% are assessed for all species for displacement assessments.	
REP1-056.99	2.1.2.4.5 Precaution in assessments and range based approach 137. Based on the above we consider that the use of single values, as used by the Applicant, runs a significant risk of 'false precision', which is inappropriate given the range of responses apparently recorded and the limitations of the studies so far carried out. As a result, NRW (A)'s recommended range-based approach seeks to encompass a range of potential displacement effects as observed in post-construction monitoring studies and mortality rates that reflect the considerable uncertainty relating to site-specific drivers for, and impacts of, displacement. We also highlight that the mortality rates are a simple way of attempting to capture a range of sub-lethal as well as lethal effects from displacement, e.g. adults entering the breeding season in poor condition. We would highlight that this approach is evidence-based and consider that it better reflects the relatively data poor landscape of offshore impact assessment.	
REP1-056.100	138. We note that in their response to this issue (see response to reference RR-011.19 in PDA-008) the Applicant states that 'it considers it overly precautionary to undertake the HRA using the	

Reference	Written Submission Comment	Applicant's response
	largest displacement impacts, which are not scientifically justified.' We note that NRW (A) are not advising that the HRA be based solely on the upper end of the % displacement and % mortality rates advised (e.g. 70% displacement and 10% mortality for auks), but we are advising that in order to account for the large degree of uncertainty regarding displacement rates and effects that the assessments consider a range of potential rates and effects rather than focussing on a single figure as the Applicant has done in their HRA documents. Additionally, seabirds in general also continue to experience multiple human induced pressures that offshore developments are at risk of accentuating. Therefore, NRW (A) does not consider our advised approach to the impact assessment to be unduly precautionary and question the characterisation of it as such in light of the evidence base and high levels of uncertainty regarding the consequences of displacement.	
REP1-056.101	139. We would highlight that NRW (A) will base our advice and conclusions on assessments that consider the full range of advised displacement and mortality rates that follow SNCB guidance. As the apportioned impacts across the full range of advised displacement and mortality rates are currently not available for each designated site, we therefore suggest that the Applicant provides this information into the examination as soon as possible. With regard to presenting assessments following SNCB advised approaches in applications, we recommend that the Applicant considers the recent letter from PINS to the Outer Dowsing Applicant that requests that the Applicant presents assessments following NE (and others) advocated approaches as well as their own into the examination - see: EN010130-000725-20240703 Rule 17 Request for further Information.pdf (planninginspectorate.gov.uk)	
REP1-056.102	2.1.2.5 In-combination Assessments (Applicant response reference to RR-011.20 and RR-011.22 in PDA-008) 140. We again reiterate our advice provided in our Relevant Representations [RR-011] that the approach taken by the Applicant to in-combination assessment may be appropriate for this project where predicted impacts from the project alone are likely very small. However, we advise that the Applicant considers our advice	The Applicant notes and welcomes NRW's comment that the assessment methodology presented in the HRA Stage 1 Screening Report (E1.4 F02) and HRA Stage 2 ISAA Part Three: SPAs and Ramsar sites Assessments (E1.3 F02) might be appropriate for the Mona Offshore Wind Project due to the projects very small predicted impacts. NRW's advice regarding the consideration of apportioned impacts across the full range of SNCB-advised percentage displacement and mortality rates is noted, and a response has

Reference	Written Submission Comment	Applicant's response
	in the Sections above, particularly regarding the advice for the Applicant to consider the apportioned impacts across the full range of SNCB advised % displacement and % mortality rates.	been provided in relation to these points above (REP1-056.90 to REP1-056.101). It is noted that NRW's advice is provided in relation to Welsh designated sites only. The Applicant's methodology was developed pre-application in consultation with NRW, Natural England and the Joint Nature Conservation Committee as members of the Expert Working Group (EWG) for offshore ornithology (see Technical Engagement Plan (APP-041)). The Applicant considers the assessments presented in Volume 2, Chapter 5: Offshore ornithology (F2.5 F02) and the HRA Stage 2 ISAA Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02) are robust, precautionary and proportionate to the risks posed to the qualifying features of designated sites both within and outside of Welsh waters from the Mona Offshore Wind Project alone and in-combination with other plans and projects.
REP1-056.103	141. We also note that this advice is provided with regard to Welsh designated sites only. As we noted in our Relevant Representations [RR-011], the approach taken by the Applicant may not be appropriate in other situations, including for designated sites where in-combination impacts are already close to/at levels that are already considered to be of an adverse effect; or designated sites considered to be in unfavourable condition/have restore conservation objectives. We note that this may be the case for designated sites located outside of Wales. We again note that it also does not mean that impacts from the Mona project should be excluded from in-combination totals for future project assessments.	
REP1-056.104	142. Therefore, it should be noted that we do not endorse this approach for use by future projects and recommend that future Applicants discuss proposed approaches to in-combination assessments with NRW (A) (and/or other relevant SNCBs) well in advance of submission.	
REP1-056.105	143. We again reiterate that, if following the advice we have provided in the various sections above, the Applicant's apportioned impacts predict further Welsh site and feature combination impacts from the project alone may exceed 0.05% of baseline mortality, then the gaps in the cumulative and hence in-combination assessments will need to be addressed.	The Applicant notes NRW's comment. Please see the Applicant's responses to specific points raised above, specifically in relation to REP1-056.71 to REP1-056.72. Any additional information provided into examination for the Mona Offshore Wind Project will be undertaken in accordance with the methodologies presented in Volume 2, Chapter 5: Offshore ornithology (F2.5 F02), HRA Stage 1 Screening Report (E1.4 F02) and the HRA Stage 2 ISAA Part Three: Special Protection Areas and Ramsar sites Assessments (E1.3 F02). For clarity, following updates to the season mean abundance and bio-seasons for black-legged kittiwake, three additional sites were presented for in-combination assessment within HRA Stage 2 ISAA for SPAs and Ramsar sites Assessment (E1.3 F02) submitted at Deadline 2. However, none of the additional sites are located within Welsh waters.
REP1-056.106	2.1.2.6 Liverpool Bay SPA (Applicant response reference to RR-011.23 and RR-011.24 in PDA-008) 144. The proposed Mona array is located 10km from the Liverpool	The Applicant notes and welcomes NRW's comments.

Reference	Written Submission Comment	Applicant's response
	Bay SPA, but the offshore export cable route goes through the SPA. Red-throated diver (RTD) and common scoter are features of Liverpool Bay SPA, and common scoter are included as a priority species in the section 7 list made pursuant to the Environment (Wales) Act 2016. Both species are sensitive to anthropogenic disturbance and displacement, including from vessel movements (Fliessbach et al. 2019; Kaiser et al. 2002). As the port location is currently unknown, there is the possibility that vessels transiting from port to the array area could travel through the SPA to reach the array during all phases of the project.	
REP1-056.107	145. As noted in our Relevant Representations [RR-011], we welcome the measures listed within the Stage 2 ISAA Part 3 – SPAs and Ramsars [APP-033] of adherence to an offshore Environmental Management Plan (EMP) that will include: • Measures to minimise disturbance to rafting birds from transiting vessels (as set out in APP-203). • A timing restriction of no offshore export cable installation during the period 1st November – 31st March within Liverpool Bay SPA. • A Marine Pollution Contingency Plan (MPCP).	
REP1-056.108	146. We agree that this EMP, and the specific aspects within it that the Applicant commits to listed above, is needed and is necessary to avoid or reduce disturbance, and therefore displacement and pollution impacts to the RTD and common scoter features of the SPA from both cable laying activities in the construction phase, and from vessels potentially transiting from port to the array during all phases.	The Applicant notes and welcomes NRW's comments.
REP1-056.109	147. As was noted during the EWG, the SNCBs consider that there is not much that can be done to minimise disturbance to RTD and common scoter due to cable installation works, and the measures to minimise disturbance (such as those committed to by the Applicant in APP-203) were more related to activities such as Crew Transfer Vessel movements, rather than cable installation works. The only effective measure to minimise disturbance from cable installation works is to not be present in the area. Therefore, we note that the Applicant's commitment to measures to minimise disturbance to rafting birds from transiting vessels is only	The Applicant notes and welcomes NRW's comments regarding the Applicant's commitment to a seasonal restriction for the offshore export cable installation works during the period 1 November to 31 March within the Liverpool Bay Special Protection Area (SPA). This commitment is included in the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels and is only relevant to the transmission marine licence which is outside the scope of the DCO dML, As set out in the Marine Licence Principles document (PDA-005) this

Reference	Written Submission Comment	Applicant's response
	applicable to minimising disturbance to these features of the SPA from vessel transit movements to the array through the SPA during all phases.	commitment is also expected to be secured within the standalone NRW marine licence. The Applicant confirms that the other measures to minimise disturbance to rafting birds outlined in the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (APP-203) document principally relate to vessels travelling to and from the Mona Offshore Cable Corridor and Array Area within and outside Liverpool Bay/Bae Lerpwl SPA.
REP1-056.110	148. Given that vessels laying the offshore export cable within the SPA will need to follow the specific route for the offshore export cable, it will not be possible for them to adhere to the measures set out by the Applicant in APP-203, such as using existing shipping lanes/transit routes, avoiding aggregations of rafting birds etc. Therefore, the Applicant's commitment to the timing restriction on offshore export cable installation activities to avoid the key winter period when the features of concern will be present in greatest numbers, is welcomed in order to minimise disturbance to the relevant SPA features from this activity within the SPA.	
REP1-056.111	149. Whilst the adherence to an offshore EMP is secured within the deemed marine licence in Point 18 of Part 2 of Schedule 14 of the draft DCO (in 'C1 Draft Development Consent Order F03' [PDA-003]), we note that the cable laying timing restriction aspect of the EMP is not included within the list of information to be included in the EMP listed within Part e) of point 18 of conditions listed in Part 2 of Schedule 14 of the draft DCO [PDA-003]. We consider that this aspect of the measures/conditions within the EMP needs to also be included within the DCO and committed to and secured in the deemed marine licence in order to minimise disturbance to the key features from this activity. We also note that it is the Applicant's intention to secure an offshore EMP in the standalone Marine Licence (ML) (as set out in the row relating to Project Environmental Monitoring Plan, PEMP, in the 'Marine Licence Principles Document 02' [PDA-005]).We welcome the intention to also secure this commitment in the standalone ML.	The Offshore Environmental Management Plan (EMP) will be finalised in accordance with the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels (APP-203). The Applicant's commitment to a seasonal restriction for the offshore export cable installation works during the period 1 November to 31 March within the Liverpool Bay Special Protection Area (SPA) is included in the Measures to Minimise Disturbance to Marine Mammals and Rafting Birds from Transiting Vessels and is only relevant to the transmission marine licence which is outside the scope of the DCO dML, As set out in the Marine Licence Principles document (PDA –005) this commitment is also expected to be secured within the standalone NRW marine licence.
REP1-056.112	150. We note that, in PDA-005 in the row on the Project Environmental Management Plan (PEMP) (page 20), whilst the timing restriction is mentioned as a measure that the offshore EMP should include, it is currently added to the point on measures to minimise the potential spread of invasive non-native species. This timing restriction is not related to minimising spread of INNS, rather it is related to reducing/minimising disturbance effects to the	The Applicant notes NRW's comment. The updated Marine Licence Principles document (J3 F02) submitted at Deadline 2 corrects this typo and makes clear that the timing restriction is not related to the potential spread of invasive non-native species.

Reference	Written Submission Comment	Applicant's response
	wintering features of the Liverpool Bay SPA. As such, we consider that this should be separated out to be a standalone point required to be included in the EMP.	
REP1-056.113	151. Subject to an appropriate EMP that includes all the measures listed above being agreed, in writing by NRW (A) and JNCC, and secured as a condition of the deemed ML and standalone ML, we consider it to be unlikely that there will be an adverse effect on Liverpool Bay SPA.	The Applicant notes and welcome NRW's comment.
REP1-056.114	152. With regard to the timing restriction on offshore export cable installation activities within the SPA not applying to the trenchless works on the intertidal zone (as raised in our Relevant Representations), we acknowledge the Applicant's position set out in their response to RR-011.24 of PDA-008 that prohibiting works at the trenchless techniques exit pits during the overwintering period would add further pressure to the installation window for offshore export cables. For this aspect of the work, we note: • Any disturbance impact to features of the SPA will be temporary for the time of the vessel presence. • Birds will be able to return once the vessel has gone. • There will be other habitat available within the SPA to the birds for the time they are disturbed from the landfall area. • Up to 8 movements across the key winter period of November-March represents a small proportion over this timescale. • A commitment to trenchless works at the landfall has been made – the Applicant's commitment to installing export cables from landward of mean low water springs (MLWS) to onshore by trenchless techniques is secured through the Outline landfall construction method statement [APP-226] and the Outline landfall construction method statement forms part of the Code of Construction Practice (CoCP) and is therefore secured under Schedule 2, Requirement 9 of the Draft DCO (see 'C1 Draft Development Consent Order F03' [PDA-003]).	The Applicant notes NRW's comment.
REP1-056.115	153. Based on the above, NRW (A) does not expect this temporary activity as part of the construction phase will result in an Adverse Effect on Site Integrity (AEoSI) on the wintering waterbird features of the Liverpool Bay SPA.	The Applicant notes and welcomes NRW's comment.

Reference	Written Submission Comment	Applicant's response
REP1-056.116	2.1.2.7 Design parameters in draft DCO (Applicant response reference to RR-011.25 in PDA-008) 154. We welcome that in document 'C1 Draft Development Consent Order F03' [PDA-003], the Applicant has updated Table 4 of design parameters in Schedule 14 Part 2 to include a parameter for the rotor swept area.	The Applicant notes NRW's comment.
REP1-056.117	2.2 Marine Mammals 2.2.1 Baseline 155. NRW (A) agrees with the data collected through surveys and literature including the data sources used to characterise the baseline, as well as the management unit approach adopted [APP-056] (although please see section 2.2.9 below), as discussed through the various EWGs [APP-042]. We agree with the majority of the conclusions in the ES and HRA, unless listed in the representations below.	The Applicant thanks NRW (A) for confirming agreement with the baseline characterisation, management unit approach and the majority of the conclusions in Volume 2, Chapter 4: Marine Mammals (APP-056). The Applicant has responded to NRW's further representations below.
REP1-056.118	2.2.2 Injury and disturbance to marine mammals from elevated underwater sound due to vessel use and other (non-piling) sound producing activities 156. In its Relevant Representation [RR-011], NRW(A) acknowledged and welcomed the information provided with regard to vessel traffic data [APP-056], as well as the information provided in APP-098 with respect to Navigational Risk Assessment (NRA). We advised however, that there was inadequate justification for an overall conclusion of low magnitude, further noting that the estimated numbers of animals disturbed by vessels and any subsequent conclusions appear to have been based on static impact radii – i.e. equivalent to vessels that are not moving. Given that vessels would be expected to move location, we consider that estimating numbers based on static impact radii may lead to both underestimates of daily numbers disturbed, and an underestimate of the overall daily area ensonified; which is required to compare against the time area thresholds for an adverse effect for harbour porpoise Special Areas of Conservation (SACs).	The Applicant welcomes the agreement in REP1-056.123, that due to the Applicant's commitment to the development of, and adherence to, an Offshore Environmental Management Plan (EMP), which includes measures to minimise disturbance to marine mammals (and rafting birds) from transiting vessels; NRW considers the impact of elevated underwater sound due to vessel use and other (non-piling) sound producing activities should be mitigated, making the 'overall conclusion acceptable' (of low magnitude). The Applicant would like to highlight that the 23 km referenced in paragraph 4.9.5.22 of Volume 2, Chapter 4: Marine Mammals (APP-056) is a discrepancy carried over from PEIR and is corrected in the Errata Sheet (REP1-044). The maximum disturbance range from vessels is 4.082 km (as referenced in Table 4.43 in Volume 2, Chapter 4: Marine Mammals (APP-056)). The Applicant highlights, in line with the response to NRW in the Applicant's Responses to Relevant Representations (PDA-008), in which the matter of disturbance from vessel noise was raised, that the ranges/numbers of animals disturbed presented are based on responses to moving vessels gathered from a literature review of empirical data from field studies, therefore, not on static impact radii.
REP1-056.119	157. Paragraph 4.9.5.22 of [APP-056] concludes that "Multiplying the area of ensonification by each species-specific density would lead to unrealistic estimates, as serious disturbance would not	

Reference	Written Submission Comment	Applicant's response
	occur over ranges such as 23 km. As such, this value has not been quantified." In our PEIR response, NRW(A) acknowledged that it is unrealistic to assess injury and disturbance from vessel use by presenting a sum of the impact ranges of all vessels. This is because the level of detail necessary to assess the trips of over 2000 vessels of different size and function for the project alone would be impractical and disproportionate in terms of the time required. While we still hold to this opinion, this does not preclude the need to propose an alternative method to gauge the number of animals affected by this impact pathway, which we suggest can be done by making certain assumptions to make the calculation more tractable.	The Applicant welcomes NRW's agreement that it would be unrealistic to assess injury and disturbance from vessel use by presenting a sum of the impact ranges of all vessels. NRW states that "this does not preclude the need to propose an alternative method to gauge the number of animals affected by this impact pathway", and the Applicant highlights that an alternative method was proposed and used in the assessment for the Application in Volume 2, Chapter 4: Marine Mammals (APP-056), which took into account the feedback from NRW and other stakeholders in response to PEIR and gave numbers of animals disturbed per vessel using highly precautionary impact ranges from literature. The Applicant also quantified the elevation in the number of vessels above the baseline. The Applicant did not go further and sum the impact ranges of all vessels, as, in agreement with NRW, this would be unrealistic and lead to a highly over-amplified assessment. The Applicant reviewed the suggested Wylfa assessment following PEIR responses, highlighting NRW state in REP-056.121 "This is by no means prescriptive and other approaches can be taken". The Applicant highlights the Wylfa Newydd study had a maximum impact range of 60 m, and this assessment had modelled ranges of ~4 km. In any case, as described above, the assessment applied a highly conservative disturbance range of up to 7 km (based on a literature review) This represents a 3 km buffer around the modelled impact range of ~4 km. The Wylfa study also assessed harbour porpoise responses using different and older thresholds for a "minor" behavioural effect, which were derived from single airgun impulses (i.e., not a continuous threshold), and therefore, the approach is not comparable. The Applicant highlights that the conservative range of 7 km (used in Section 4.9.5 of Volume 2, Chapter 4: Marine Mammals (APP-056)) is far enough from the North Anglesey Marine/Gogledd Môn Forol Special Area of Conservation (SAC) (which lies 23.67 km from the Mona Array Area and 17.5 km from the Mona Offshore Cable Corridor as detailed in Table 4.11 in Volume 2, Chapter 4: Marine Mammals (APP-056)) that there would be no time/area threshold exceedance (JNCC, Natural England, and DAERA, 2020) (exceeding the threshold could indicate significant disturbance), and therefore no potential adverse effect on the integrity of the North Anglesey Marine/Gogledd Môn Forol SAC, for which harbour porpoise are a feature. The Applicant considers that the marine mammal assessment in Volume 2,
REP1-056.120	158. Given the known sensitivity of harbour porpoise (Dyndo et al. 2015; Wisniewska et al. 2018; Rojano-Doñate et al. 2023) and other marine mammal species (e.g. Marley et al. 2017a, 2017b; Erbe et al. 2019) to vessel noise and the increase of the number of vessel trips in the area as a result of the construction / operation of the proposed development (an additional 2055 trips per year within the array area) compared to baseline vessel traffic (approximately 3166 trips per year within the array area), we do not agree with an overall magnitude of low, and recommend that the assessment is revised and quantified both for the project alone and in-combination in a manner that takes into particular account the impact of repeated and chronic interruptions to harbour porpoise foraging.	
REP1-056.121	159. As a point of clarification in the actions following EWG05 the Applicant requested further advice from NRW (A) on how to assess disturbance from vessels. Our email response of 27 July 2023 was as follows: "In our PEIR comments, NRW(A) provided an example of how this could be done, referring to the Wylfa assessment which considered disturbance based on the travel paths of vessels used by the project. This by no means prescriptive and other approaches can be taken. We recommend that the crucial thing to consider is to avoid basing assessment conclusions on assumptions that marine mammals are anticipated to demonstrate some degree of habituation to sound from vessels as this runs the risk of verging into speculation and overlooking the extent of a potential impact pathway. While it is reasonably likely that boat noise as a stressor	

Reference	Written Submission Comment	Applicant's response
	is tolerated by marine mammals, absence of displacement is not evidence of absence of all detrimental consequences to animals. Responses may be physiological which are harder to detect, and animals may react by reducing foraging which leads to energy intake costs (e.g. harbour porpoise, see Rojano-Donate et al. 2023 - presented at Oceanoise 2023), or making deeper dives increasing swimming effort, and ceasing echolocation and foraging for several minutes (Wisniewska et al. 2018). Thus the presence of vessels almost certainly has an energetic cost to harbour porpoise. Similar / related findings were made by, e.g. Pirotta et al. (2013, 2015), Dyndo et al. (2015), Oakley et al. (2017), Marley et al. (2017a, 2017b). Other arguments such as the increase in number of vessels will be small when compared to the baseline shipping traffic should ideally also be quantified. In future, ideally, direct measures of the associated energetic costs of exposure would be available for Population Consequence of Disturbance (PCoD) models, to link disturbance parameters to fitness and population dynamics, however work on this is still ongoing".	Chapter 4: Marine Mammals (APP-056) has gone above and beyond previously accepted DCO applications such as Awel y Mor, and that further calculations would not change the outcome of the assessment. The Applicant also reviewed the use of the term "habituation", as requested by NRW in their PEIR response, and amended reference to this in Volume 2, Chapter 4: Marine Mammals (APP-056) to focus more on tolerance to vessel noise (NRW stated "it is reasonably likely that boat noise as a stressor is tolerated by marine mammals"). As outlined in the Applicant's Response to Relevant Representation NRW - Impacts on Marine Mammals from Elevated Underwater Sound Due to Vessel Use (PDA-009), there are a number of studies which demonstrate that marine mammals remain in areas of high vessel traffic with no detected change in foraging behaviour that the speed of the vessel is an important factor in the direct response of animals (Hao *et al.,* 2024). The Applicant agrees with NRW that in the future direct measures of associated energetic costs of exposure to be used in Population Consequence of Disturbance (PCoD) models would be useful, to be able to link disturbance parameters to fitness and population dynamics, however the Applicant's understanding is that the expert-elicitation required to estimate the parameters for disturbance from vessel will not be available for Mona Offshore Wind Project (model functionality is limited to piling and collisions/entanglement only), and therefore it cannot be incorporated. Therefore, the Applicant considers the conclusion of low magnitude is robust and notes agreement with NRW due to the inclusion of the Offshore Environmental Management Plan (EMP) (see Mitigation and Monitoring Schedule (APP-196)) which includes measures to minimise disturbance to marine mammals (and rafting birds) from transiting vessels, including reduction in speeds where an animal is in the vicinity of a moving vessel.
REP1-056.122	160. We suggest adapting the approach taken for the Wylfa Newydd project (5.2 Shadow Habitats Regulations Assessment Report) referred to in paragraph 134, noting that conclusions on magnitude and significance for the operational and decommissioning phases may need to be reviewed and updated based on the assessment for the construction phase. This method would involve assuming that all vessels involved in the construction, operation, and decommissioning phases travel along the same track from port to their required location. For simplicity, this could be taken to be e.g. the centre of the array. A value from the literature, could then be used as an impact radius on either side of the track to allow calculation of an estimated area (and estimated numbers) ensonified on a daily basis. Further refinements could also be included, for example information on expected recovery time which could be touched upon qualitatively in an evidence-based discussion in the text.	
REP1-056.123	161. NRW (A) has reviewed the Applicant's response [PDA-008 and relevant documents references therein] to our Relevant Representation [RR-011] on the matters relating to injury and	

Reference	Written Submission Comment	Applicant's response
	disturbance to marine mammals from elevated underwater sound due to vessel use and other non-piling sound producing activities. Paragraph 1.2.1.15 of PDA-009 notes the commitment of the Applicant to the development of, and adherence to, an Offshore Environmental Management Plan (EMP) which includes measures to minimise disturbance to marine mammals (and rafting birds) from transiting vessels. We welcome this commitment, which we consider should mitigate most of the impacts, making the overall conclusion acceptable.	
REP1-056.124	2.2.3 Injury from elevated underwater sound due to piling: 162. Exposure of marine mammals to loud sounds, such as those generated by pile driving, can lead to reductions in hearing sensitivity known as "threshold shifts" (TS). These can either be temporary (TTS), or permanent (PTS). In the UK, PTS is considered an injury (JNCC 2010). Threshold shifts are assessed using the most recent set of auditory injury criteria (currently Southall et al. 2019). For impulsive noise (i.e., noise that has almost instantaneous spikes in the sound level, like for example pile driving), two metrics are used: the sound pressure level (SPL, i.e., the maximum sound level at any point) and the sound exposure level (SEL, i.e., the sound an animal is exposed to over a period of time).	The Applicant notes that the matter of assessing disturbance from ADD use was raised in NRW's Relevant Representation (RR-011), and a response was provided in the Applicant's Response to Relevant Representations (PDA-008). The Applicant welcomes NRW's statement in REP1-056.130 that 'we consider that the Applicant's response (in the Applicant's Response to Relevant Representations (PDA-008)) is sufficient, noting in particular the final paragraph which states that "Therefore, the Applicant understands the need for proportionate and judiciary application of Acoustic Deterrent Devices (ADDs), and this will be considered carefully when finalising the ADD deployment duration post consent"'. The Applicant reiterates that the 30 minute indicative activation period used referenced in Volume 2, Chapter 4: Marine Mammals (APP-056) for the purpose of the assessment is not a fixed time period and highlights its commitment that the final ADD duration will be agreed post-consent in the final Marine Mammal Mitigation Protocol (MMMP). The Applicant acknowledges the indicative 30 minutes ADD duration that was modelled for Volume 2, Chapter 4: Marine Mammals (APP-056) leads to large swim distances (i.e. the distance an animal moves away during ADD activation, based on conservative swim speeds) for species including harbour porpoise and minke whale compared to the instantaneous Permanent Threshold Shift ranges. This will be considered in the final MMMP where ADD duration will be tailored specifically to the final project design post consent. The final MMMP will be developed in accordance with the outline MMMP (APP-203) in consultation with NRW and relevant statutory nature conservation bodies. This is secured in Schedule 14, Condition 18(1)(h) of the draft DCO (C1 Draft Development Consent Order F04)). It is also
REP1-056.125	163. These two metrics account for the different aspects of impulsive noise from piling, that is: (1) exposure to sound level, and (2) duration. SEL can be used as a measure of the sound energy released over a single pile strike, a metric known as single strike SEL (SELss) or summed over multiple pile strikes using a metric known as cumulative SEL (SELcum) When carrying out impact assessments, we often refer to instantaneous PTS (from SPL) and cumulative PTS (from SELcum), and the spatial extent or range (m to km) that can elicit PTS in marine mammal species from instantaneous and cumulative noise respectively	
REP1-056.126	164. Acoustic Deterrent Devices (ADDs) are often used to deter marine mammals from pile driving operations that may otherwise cause hearing injury. These devices work by emitting a noise to which the target animal is sensitive, and at a level loud enough, or	

Reference	Written Submission Comment	Applicant's response
	for a long enough time period, to elicit a behavioural reaction sufficient for the animal to swim away to a safe distance – i.e. a deterrence range. This deterrence range can be altered based on the expected PTS impact range.	anticipated that this condition will be secured in the standalone marine licence (see the Marine licence principles document – J9 F03). The Applicant welcomes NRW's agreement that "the overall conclusions of the assessment are valid" and that no separate ADD assessment is required. The Applicant, therefore, considers this matter to be resolved. The Applicant confirms the two metrics (peak sound pressure level (SPLpk) and cumulative sound exposure level (SELcum)) NRW discuss in their Written Representation (REP1-056.125) are used in the assessment of injury from elevated underwater sound due to piling and factored into the discussion on mitigation for injury to marine mammals.
REP1-056.127	165. RR-011 (section 2.2.3) noted that a conclusion of negligible magnitude for auditory injury impact pathway (i.e. Permanent threshold shift / PTS) had been assigned based on the inclusion of the potential indicative use of designed-in measures (i.e. 30 minutes of ADDs). NRW (A) advised that consideration of the large-scale use of ADDs was required, as evidenced by, for example, Elmegaard et al. (2023), which demonstrates that harbour porpoise show very strong flight and physiological responses to ADD use far beyond the intended range of mitigation. We believe that there is a risk that in an effort to reduce the number of animals injured, a reliance on ADD deployment over other forms of mitigation will increase the number of animals disturbed, particularly harbour porpoise. A deterrence sound must be efficient in clearing an area of animals, yet it should not cause disruptions at scales larger than necessary.	
REP1-056.128	166. In principle, we agree with the overall conclusion of minor adverse significance, based on numbers presented in the "no ADD" scenario [APP-056]. However, while we acknowledge that the proposed mitigation strategy outlined in the ES [APP-056], Marine Mammal Mitigation Protocol (MMMP) [APP-207] and Underwater Sound Management Strategy (UWSMS) [APP-202] is to be agreed post-consent, we note that the length of ADD exposure should be scaled to the need - i.e. the impact range from PTS. Where exposure length is indicative, this should be made clear. Based on results presented in the ES [APP-056], the range at which instantaneous PTS could be elicited at maximum hammer energy (for a hammer energy of 4400 kJ) ranged between 41 – 662 m. The threshold for eliciting cumulative PTS was not exceeded for any species except Minke whale. Estimated swim distances for 30 minutes of ADD activation ranged between 2,700m (for harbour porpoise) to 4,140m (for minke whale). Given the (1) short impact range for instantaneous PTS, (2) a maximum of 4 minke whales (but no other species) predicted to be injured from cumulative PTS	

Reference	Written Submission Comment	Applicant's response
	in a no ADD scenario (reduced to <1 in a 30 min ADD scenario), and (3) swim distances that exceeded the PTS impact range for all species other than minke whale, we believe that the indicative length of ADD exposure may be excessive when considering the additional noise and disturbance introduced to the environment. We consider that there are other ways that the range could be reduced, for example by altering the pattern of pile strikes - especially by increasing the time between each strike. We would be happy to discuss this further with the Applicant.	
REP1-056.129	167. Evidence from Elmegaard et al. (2023), Graham et al. (2023), Voß et al. (2023), and Brandt et al. (2013) demonstrates that harbour porpoise show very strong flight and physiological responses to ADD use even at low received levels and often far beyond the intended mitigation zone. This evidence is corroborated by data collected on porpoise response (displacement) to chronic and long-term exposure to ADDs at aquaculture sites (Findlay et al. 2024). Such energetic responses to noise may have a cumulative effect on health if they occur frequently enough, particularly for porpoise who are thought to need to forage constantly to meet their energy demands.	
REP1-056.130	168. We note the Applicant's response to the matters raised concerning ADD use in PDA-008 (RR-011.28). On balance, we consider that the Applicant's response is sufficient, noting in particular the final paragraph which states that "Therefore, the Applicant understands the need for proportionate and judiciary application of ADDs, and this will be considered carefully when finalising the ADD deployment duration post consent". We confirm that we agree with the Applicant that overall conclusions of the assessment are valid. We can also confirm that we do not believe it is necessary for the Applicant to assess separately the effects of Acoustic Deterrent Devices given that proportionate application of ADD use will be considered post consent.	
REP1-056.131	169. However, we also note the Applicant's assertion at RR-011.28 [PDA-008] that the approach adopted is typical for Offshore wind assessments and that neither during the EWG consultation process nor in the S42 response, was this concern raised by NRW (A) or	

Reference	Written Submission Comment	Applicant's response
	other stakeholders. NRW (A) contend that this approach being "typical" does not preclude that publication of new evidence, akin to Elmegaard et al. (2023), Graham et al. (2023), and Voβ et al. (2023) , may lead to questions being raised with respect to existing approaches. Furthermore, as per the agreement logs [APP-042] this issue was raised by both NRW (A) and NE.	
REP1-056.132	170. We welcome the Applicant's commitment as referenced in in PDA-008 (RR-011.28) that the time period and final ADD duration will be agreed post-consent in the final MMMP and secured by condition within the DCO. We advise that such a condition will also need to be secured within the Marine Licence associated with the Transmission Assets.	
REP1-056.133	2.2.4 Barrier effects 171. We noted in our Relevant Representation [RR-011] that limited justification had been provided for the absence of cumulative assessment of barrier effects. This is particularly relevant given the planned construction and operation of four new offshore windfarm arrays (Awel-y-Môr, Mona, Morgan, Morecambe) in the area. We advised that clarity and potentially further assessment was required.	The Applicant notes that NRW raised barrier effects in their Relevant Representation (RR-011), and a response was provided in the Applicant's Response to Relevant Representations (PDA-008). The Applicant welcomes NRW's confirmation that the response provided was sufficient to address NRW's concerns. The Applicant agrees with NRW that a conclusion of non-significance from an EIA perspective is not equivalent to a lack of an effect, and this is presented in detail in Volume 2, Chapter 4: Marine mammals (APP-056), which discusses barrier effects, particularly for bottlenose dolphin and grey seal/harbour seal. The Applicant, therefore, considers the assessment to be robust, and this matter to be resolved. The Applicant notes NRW's comments regarding the Underwater Sound Management Strategy (UWSMS). The final UWSMS will be developed post-consent in accordance with the outline UWSMS (APP-202) in consultation with NRW and relevant statutory nature conservation bodies. This is secured in Schedule 14, Condition 20 of the draft development consent order (C1 Draft Development Consent Order F04).
REP1-056.134	172. We note the Applicant's response to this matter, as stated at RR-011.29 [PDA-008]. It is our view that a conclusion of non-significance for the project alone does not necessarily imply that the effects of all projects together may potentially result in a scaling up of effects. Similarly, we advise that a conclusion of non-significance from an EIA perspective is not equivalent to lack of an effect. In addition, we would caution that while NRW (A)'s agreement that the UWSMS could reduce the magnitude of impacts to an acceptable level, this should not be taken to imply unconditional agreement prior to any measures being discussed and finalised post-consent, nor should it be concluded "that NRW (A) agrees this is a solid platform for managing underwater sound" and as a result incorporated into the assessment of barrier effects.	

Reference	Written Submission Comment	Applicant's response
REP1-056.135	173. On balance, we consider that the Applicant's response is sufficient, noting in particular that it would be unlikely that all four of these projects will undergo construction activities at the same time.	
REP1-056.136	2.2.5 Interrelated effects 174. We noted in our relevant representation that there was inadequate, evidence-based, justification for the conclusion that "the effects on marine mammal receptors are not anticipated to interact in such a way as to result in combined effects of greater significance than the assessments presented for each individual phase or when considered in conjunction with other topics addressed in the ES" [APP-056].	The Applicant notes that interrelated effects were raised by NRW in their Relevant Representation (RR-011) and a response was provided in the Applicant's Response to Relevant Representations from NRW: Interrelated Effects (PDA-010). The Applicant welcomes NRW's comment that in light of the additional information provided in the Applicant's Response to Relevant Representations from NRW: Interrelated Effects (PDA-010), they anticipate being able to agree with the overall conclusion in Volume 2, Chapter 4: Marine mammals (APP-056), that the significance considered to be minor adverse and therefore not significant in EIA terms. The final Marine Mammal Mitigation Protocol (MMMP) will be developed in accordance with the Outline MMMP (APP-207) in consultation with NRW and other relevant stakeholders and is secured within Schedule 14, Condition 18(1)(i) of the draft development consent order (C1 Draft Development Consent Order F04). The Applicant welcomes NRW's acknowledgement of the inherent challenges in quantifying interrelated effects and the Applicant has endeavoured to give a robust evidence-based justification for the conclusion that there is no significant interrelated effect on marine mammals (as set out in Volume 2, Chapter 4: Marine mammals (APP-056) and the Applicant's Response to Relevant Representation from Natural Resources Wales (NRW): Interrelated Effects (PDA-010)). The Applicant notes NRW's suggestion to consider aggregate exposure of all activities over the lifetime of the Mona Offshore Wind Project. We consider the detailed response in the Applicant's Response to Relevant Representations from NRW: Interrelated Effects (PDA-010) robust, as it considers the potential for additive, synergistic or antagonistic effects from stressors associated with the Mona Offshore Wind Project. The interrelated assessment considers impacts both within phases (i.e. construction, operations and maintenance, decommissioning) and across all phases over the project lifetime and considers the interaction between stressors. It is acknowledged in paragraph 176 that NRW "anticipate being able to agree with the overall conclusion in the ES [APP-056] following discussion and
REP1-056.137	175. While the effect of two or more pressures acting together may not necessarily be additive (e.g. Crain 2008; Thomsen & Popper 2024), this does not rule out such a possibility occurring. The presence of several different pressures at the same time could also lead to different responses compared to when the animal is exposed to one. Animals within a population may potentially be making adaptive trade-offs to avoid or remain within a prime habitat due to the presence of favourable prey resources and site quality, even when exposed to noise, yet they may not have sufficient resilience to adapt to additional pressures.	
REP1-056.138	176. We have reviewed the Applicant's response in PDA-010 on interrelated effects. On balance, given the mitigation measures planned, including development of the MMMP, and being conscious of the challenges inherent in quantifying such effects, we anticipate being able to agree with the overall conclusion in the ES [APP-056] following discussion and provided agreement is reached on mitigation measures post-consent.	
REP1-056.139	177. In the Applicant's response [PDA-010] we note that the conclusions are underpinned by statements that "the effect of behavioural disturbance is reversible, and receptors are expected to recover within hours/days following the cessation of the activity, therefore unlikely to lead to any long-term, additive effects on the individual." We understand that the assessment has based its conclusion of no long-term additive effects by considering each	

Reference	Written Submission Comment	Applicant's response
	disturbance event to take place independently, assuming reversibility based on the temporary nature of the noise, and full recovery between each event. However, the potential effects of aggregate exposures to one or multiple pressures has not been discussed. The interrelated effects assessment would be made more robust by considering the potential effects of aggregate exposure, particularly within the context of this assessment being used to inform cumulative assessments with other future projects.	provided agreement is reached on mitigation measures post-consent". As such, the Applicant concludes that no additional further information is required in respect of interrelated effects.
REP1-056.140	2.2.6 Outline Underwater Sound Management Strategy (UWSMS) 178. As noted in our Relevant Representation [RR-011], we agree, in principle, with the commitment to develop an Underwater Sound Management Strategy (UWSMS), and that it should identify all potential noise sources associated with the project with further detail provided in associated mitigation plans. Whilst we acknowledge that further significant detail cannot be populated at this time, we consider it likely that the UWSMS could potentially reduce the magnitude of impacts to an acceptable level. We welcome the commitment of the Applicant to continue to engage with NRW (A) to develop the USWMS during examination and post-consent. We agree that the UWSMS be conditioned through both the dML and standalone ML. NRW (A) welcomes the opportunity to engage with the Applicant on developing the UWSMS during the examination and post-consent and consider that this is required.	The Applicant welcomes the response from NRW on the outline Underwater sound Management Strategy (UWSMS) (APP-202) and will continue to engage with NRW during the examination and post-consent. The Applicant responds on NRW's queries as below: a) As discussed in the Applicant's Response to Relevant Representations (PDA-008) in response to RR-033.58, the UWSMS (APP-202) applies to all marine mammal and fish species (as detailed in paragraph 1.1.2.1 of the UWSMS (APP-202) and mitigation is relevant to all receptors sensitive to underwater sound. However, the UWSMS targets species where a residual significant effect has been identified that cannot be mitigated by the MMMP alone. The MMMP details mitigation included as industry best practice. The wording in the final UWSMS will be developed post-consent in accordance with the outline UWSMS (APP-202) in consultation with NRW and relevant statutory stakeholders to provide this clarity. Development and adherence to an UWSMS is secured within Schedule 14, Condition 20 of the draft DCO (C1 Draft Development Consent Order F04) and expected to be secured within the standalone NRW marine licence (see the draft Marine Licence Principles Document; PDA-005). b) The Applicant emphasises that Noise Abatement Systems (NAS) is termed 'secondary' mitigation in line with guidance from IEMA (2016) but should not be taken as lesser than other primary or tertiary measures. Instead, it is a further mitigation measure considered in addition to primary and tertiary measures, which is adapted to the circumstances at the time of deployment. The final Underwater Sound Management Strategy (UWSMS) will consider a range of mitigation options including NAS technologies where necessary. The Applicant would like to highlight that all further (secondary) options will be considered fully post consent (as outlined in section 1.8 of the Outline UWSMS (APP-202)), and if required, the most
REP1-056.141	179. We have the following observations on the draft outline UWSMS as provided with the application [APP-202]: a) The document focuses only on two species: bottlenose dolphin and harbour porpoise. The current decision appears to have been based on the conclusions of significance in the ES and appears to suggest that only two species are at risk. We do not consider that this is assumption is correct. Without mitigation, all marine mammals are sensitive to injury and disturbance from piling and Unexploded Ordnance (UXO) clearance and as EPS, all cetacean species are protected from both. Thus, a conclusion of not significant / no adverse effects is not sufficient; mitigation should be included as industry best practice to reduce the risk of a residual effect to negligible in relation to EPS.	

Reference	Written Submission Comment	Applicant's response
	b) Noise abatement systems (NAS) for piling, which are technologies that reduce the noise propagating through the water during pile driving (e.g. bubble curtains), have been presented as other (or 'secondary') mitigation by the Applicant. It is our view that NAS should be given more serious consideration. c) In line with the Governments Joint Position Statement on UXO clearance [DEFRA, 2022], low order methods of clearance (i.e. methods which cause the UXO to burn out but not detonate and are thus less disruptive / damaging) should be prioritised, with high order clearance (i.e. detonation of UXO using a small explosive charge) only to be used in exceptional circumstances. We recommend that this commitment be made more explicit in the UWSMS. d) We do not recommend the proposed use of soft start charges for UXO clearance due to the substantial additional impulsive noise they introduce into the environment (Robinson et al. 2022), and their scaring effect not being proven (Lewis 1996; Keevin and Hempen 1997, Cheong et al. 2020).	appropriate option(s) applied to reduce the effects from underwater sound to a non-significant level. c) The Applicant highlights that the specific UXO mitigation hierarchy commitment is detailed clearly in paragraph 1.6.2.2 of the outline UWSMS (APP-202). The final UWSMS will be developed in consultation with NRW and other relevant stakeholders and therefore will incorporate any feedback on areas which require further clarity. d) The Applicant notes the recommendation to avoid soft start charges and directs NRW to the Applicant's response to JNCC's Relevant Representation RR-033.57 in the Applicant's Response to Relevant Representations (PDA-008). Paragraph 1.5.4.3 in the UWSMS proposes that soft start charges will be applied to deter animals from the mitigation zone for the largest possible UXO following the latest JNCC guidance (JNCC, 2010b), but the Applicant highlights the outline UWSMS (APP-202) will be developed post consent in consultation with NRW and other stakeholders, and suitable mitigation agreed with the relevant authority prior to construction commencing.
REP1-056.142	e) For Table 1.7 Summary of the reduction in key engineering parameters relevant to elevated underwater sound for the Mona Offshore Wind Project clarity should be provided as to what metric was used to measure the % reduction: i.e. whether this was measured based on SPLpeak, SEL or both since these are different metrics needed to account for the different aspects of sound exposure and duration. SPLpeak is a measure of absolute maximum exposure at any one time, whereas SEL is a measure of the sound energy of exposure accumulated over time. f) No evidence has been provided to support the statement that "it is anticipated any reduction in sound impacts from potential implementation of the NAS will act to mitigate impacts on fish species in the same area." We request that supporting evidence is provided. g) We recommend that the Applicant considers one of the key findings in ORJIPs Range Dependent nature of Impulsive Noise (RaDIN) project (ORJIP 2024). The purpose of this project was to improve our understanding of how the impulsiveness of sounds produced during pile driving and unexploded ordnance clearances	e) In response to the query on metrics Table 1.7 in APP-202, the table summarises the key engineering parameters in terms of number of piles, hammer energy, duration per pile etc as detailed in the first column of the table. The percentage reduction presented reflects reductions in these project design parameters, rather than a reduction in sound (in SPLpk or SEL). Therefore, the distinction between sound metrics is not relevant for this particular table. f) The Applicant considers any reduction in sound impacts will be beneficial for both marine mammals and fish species. Species-level benefits will be investigated and presented for the final UWSMS and will depend on the type of mitigation applied. However, the overall premise of NAS, as one potential mitigation option, is to reduce sound levels at source or to reduce the propagation of sound over distance. Therefore, the statement that NAS will be beneficial to marine mammals and fish still applies, noting that the magnitude of the benefit on a species by species basis will need to be provided in more detail if NAS is investigated further post-consent, as part of the final UWSMS. g) The Applicant welcomes NRW's recommendation to review the use of the permanent threshold shift (PTS) tool from the Offshore Renewables

Reference	Written Submission Comment	Applicant's response
	changes with increasing distance from the source, and to help refine the estimation of auditory injury impact ranges for marine mammals to reduce conservatism during noise impact assessments. One of the major findings from this project was that the time between subsequent pile strikes was found to have the largest effect on hearing injury onset ranges, where increasing the time between pile strikes significantly reduced the range of injury onset. A freely available software tool was developed by the project, which allows the user to estimate permanent hearing damage impact ranges from impact pile driving by considering a variety of factors including source level, timing between pile strikes, fleeing speed of the animal, and the assumed distance at which sound becomes non-impulsive. Work is currently ongoing to further develop the tool to be able to include ramp-up procedures, and the potential for the auditory system to recover between pile strikes. NRW(A) understands that at the application stage, consent must be considered on the basis of the maximum design envelope which considers both a realistic worst case in accordance with the precautionary principle and also to maximise flexibility in construction if consent is awarded. In addition, detailed information and further refinements of the piling schedule are normally only available further along the consenting process. Thus, post-consent, once more information on the piling schedule is available, there may the potential to consider using the PTS software tool developed from RaDIN to test the effect of altering the temporal pattern of pile strikes on PTS impact range and potentially use the temporal pattern of pile strikes as a primary mitigation method. We believe this could be particularly useful for mitigating impacts on Minke whale (LF hearing group) the species with the largest PTS impact range.	Joint Industry Programme (ORJIP) Range Dependent nature of Impulsive Noise (RaDIN) project (ORJIP 2024), and the acknowledgement that the tool requires refined project parameters and piling schedules, and therefore could only be considered post consent. Provision for the refinement of project parameters and assessment of such revisions in comparison to Volume 2, Chapter 4: Marine mammals (APP-056) has been made in the outline UWSMS (APP-202). This will include any refinements to source levels and timing of pile strikes. The Applicant highlights that the UWSMS will be developed in consultation with NRW and relevant statutory nature conservation bodies and therefore the use of the RaDIN tool and any other best-practice guidance at the time will be considered and agreed with stakeholders post consent.
REP1-056.143	180. NRW (A) confirm that for marine mammals, in view of the overall conclusions in this assessment and the commitment to an UWSMS, provided the UWSMS is produced in consultation with SNCBs during the post-consent stage, marine mammal monitoring to test the predictions made within the impact assessment would not be required from a consenting perspective although any	The Applicant welcomes confirmation that marine mammal monitoring to test the predictions made within the impact assessment would not be required, above the monitoring of underwater sound generated by the installation of the first four piled foundations of each piled foundation to be installed unless the authority otherwise agrees in writing, as secured in

Reference	Written Submission Comment	Applicant's response
	additional data collection carried out by the applicant would be welcome.	Schedule 14, Condition 25(2) of the draft development consent order (C1 Draft Development Consent Order F04).
REP1-056.144	181. We do note that noise monitoring requirements are usually specified within the Marine Licence granted and typically for offshore wind farm projects across the UK there is a requirement to measure the underwater noise from the installation of the first four piles for each foundation type, or a representative number of pile locations, or the four largest piles. NRW (A) would also adopt a standard approach to this monitoring requirement (ISO 18407:2017). We acknowledge that the applicant has already indicated their intention to carry out such monitoring in the outline MMMP [APP-207].	The Applicant notes the standard approach to this monitoring requirement and the reference to ISO 18406:2017 which describes the methodologies, procedures, and measurement systems to be used for the measurement of the radiated underwater acoustic sound generated during pile driving using percussive blows with a hammer. This is in addition to the mitigation which is secured through the MMMP and UWSMS (and as described in the rows above).
REP1-056.145	182. We noted, at 2.2.6.2 of our Relevant Representation [RR-011], a number of inconsistencies within the application documents (including in the UWSMS) relating to the Maximum Design Scenario (MDS) and advised that these inconsistencies be clarified. The Applicant has provided a clear reasoning at RR-011.32 in PDA-008 which NRW (A) welcomes. This clarification now allays our concerns. Nonetheless, we advise that section 3.5.7 of the project description [APP-050] is updated accordingly as the rationale presented in PDA-008 is not clear in APP-050.	The Applicant acknowledges NRW's acceptance of the additional explanation of the Maximum Design Scenario as presented in Volume 2, Chapter 4: Marine mammals (APP-056). The Applicant welcomes that their reasoning at RR-011.32 in PDA-008 has allayed concerns, and acknowledges that OSPs are discussed in Section 3.5.7 of the Project Description (APP-050) with the maximum number of OSPs and maximum number of legs discussed in Table 3.12, but highlights the project description does not state use of four OSPs with six legs and therefore, given there is no error, it does not require an update.
REP1-056.146	2.2.7 Underwater Sound Technical Report [APP-079] / Mona ES Marine Mammals [APP- 056] 183. We noted in our Relevant Representation that whilst we did not disagree with the overall conclusion of minor adverse significance (for both disturbance and injury) for site investigation surveys, the impact ranges for sparkers (a type of pulsed sub-bottom profiler, or SBP) appeared relatively small in contrast with the non-pulsed sub-bottom profiler methods presented. We requested further clarity in this regard. Following consideration of the Applicant's response and explanation [RR-011.33 of PDA-008] to NRW (A)'s Relevant Representations we consider this issue closed.	The Applicant welcomes NRW's response and agreement that the matter on sparker impact ranges is resolved. The Applicant therefore considers this issue to be agreed and resolved.
REP1-056.147	2.2.8 Mona ES Marine Mammals [APP-056] / Mona ISAA Special Areas of Conservation [APP-032]:	The Applicant notes NRW's response and welcomes confirmation that the matter of the effects of impulsive noise at range on disturbance does not

Reference	Written Submission Comment	Applicant's response
	184. For impulsive sources, both APP-056 and APP-032 reference (e.g. Paragraph 4.9.3.51 of APP-056) that changes in the impulsive characteristics of impulsive noise at range implies that disturbance thresholds for piling noise should be considered precautionary at long range (i.e. a few kilometres).	materially affect the conclusions of Volume 2, Chapter 4: Marine mammals (APP-056) and Stage 2 ISAA Part Two: Special Areas of Conservation (SACs) Assessments (APP-032). The Applicant highlights that paragraph 4.9.2.39 in APP-056 presents the conservative assumptions applied in underwater sound modelling and specifically the uncertainty of the effects of impulsive nose at range, highlighting that 'defining this transition range is an active area of research and scientific debate' (with further detail in paragraphs 1.5.5.26 to 1.5.5.29 of annex 3.1: Underwater sound technical report (APP-079). The Applicant, therefore, considers this issue to be resolved.
REP1-056.148	185. We have reviewed the Applicant's response at RR-011.34 [PDA-008.As outlined in our position statement [NRW 2023], we fully agree that at ranges over several kilometres impulsive noise gradually becomes more continuous due to refraction, absorption and scattering attenuating high frequencies more than low frequencies. Sound also reflects off the surface and bottom of the sea taking different paths, thus it takes a different amount of time to arrive at a given point, lengthening the pulse. In this way noise that is impulsive at the source becomes less likely to cause hearing injury with range [Hastie et al. 2019; Martin et al. 2020; ORJIP Offshore Wind, 2024].	
REP1-056.149	186. We disagree that this will affect disturbance thresholds except in very specific cases where thresholds were based on observations close to the source noting that at present, changes in impulsive characteristics have only been discussed in the published literature in terms of their effects on hearing injury but not disturbance. Similarly, to our knowledge there are currently no published data which quantify the impact of these changes with regard to disturbance, or the relative importance / extent of this in comparison with other explanatory variables such as piling duration, piling schedule, exposure to previous piling events, and other contextual factors which include differences between species and individuals, situational contexts (e.g. foraging, breeding, presence of calves), and temporal scale. Thus, although we agree that it is plausible that changes in impulsive characteristics with range will influence animal behaviour, particularly when applying thresholds at ranges further away than the observations on which they were based, we also caution against phrasing this in conclusive terms in the absence of published data.	
REP1-056.150	187. We can confirm that this does not materially affect the conclusions, since assessment results were based on the full	

Reference	Written Submission Comment	Applicant's response
	modelled range of disturbance, However, we do recommend that for this project and future projects the Applicant acknowledges the uncertainty with regard to potential effects of impulsive noise at range on disturbance and clarifies that the points and conclusions made with regard to this are their own. When sufficient evidence is found to support this, it may then be appropriate to incorporate into an assessment.	
REP1-056.151	2.2.9 Mona ISAA Special Areas of Conservation [APP-032] 188. We noted in our Relevant Representations [RR-011] that in line with NRW's position statement on use of Management Units [NRW, 2022], photo-ID evidence shows that most individual dolphins move between the two SACs, strongly supporting the idea that the populations of the two Special Areas of Conservation (SACs) are highly connected, and that there is likely a single genetic population across the management unit (although a few individuals appear to be faithful to one particular site).	The Applicant welcomes NRW's response and agreement that the matter of considering Cardigan Bay SAC and Pen Llyn a'r Sarnau SAC together is resolved.
REP1-056.152	189. Cardigan Bay (CB) SAC is the principal SAC for bottlenose dolphin and was designated primarily (Grade A) for this species, whereas bottlenose dolphins are a secondary (Grade C) feature of Pen Llyn a'r Sarnau (PLAS) SAC. However, there is no legislative reason why one site would be more important than the other, and given the strong evidence outlined above, we consider the entire Irish sea MU to be a single inter-connected unit. We therefore consider the population associated with PLAS SAC and CB SAC to be the same and that this is broadly equivalent to the population of the wider management unit for purpose of assessment of site integrity.	
REP1-056.153	190. However, we have reviewed the Applicant's response to this matter [PDA-008 section RR-011.35] and agree that this does not materially impact the conclusions of the application. We consider that this matter can now be closed.	
REP1-056.154	2.2.10 Mona ISAA Stage 1 Screening [APP-034] 191. We note the Applicant's response [PDA-008] in relation to the matters raised at Relevant Representations [RR-011 para 2.2.10]. This matter can now be considered closed.	The Applicant welcomes NRW's response and agreement that the matter on the LSE matrix tables (Table 1.40 and Table 1.51 in the Stage 2 ISAA Part Two: Special Areas of Conservation (SACs) Assessments (APP-034)) is resolved and closed.

Reference	Written Submission Comment	Applicant's response
REP1-056.155	2.2.11 Mona ISAA Stage 2 Special Areas of Conservation [APP-032], Table 1.85 Summary of SPLpk PTS injury ranges and areas of effect for marine mammals for single pin pile installation (N/E = threshold not exceeded) 192. We note the Applicant's response [PDA-008] in relation to the matters raised at Relevant Representations [RR-011 para 2.2.10]. This matter can now be considered closed.	The Applicant welcomes NRW's response and agreement that the matter on Table 1.85 in the Stage 2 ISAA Part Two: Special Areas of Conservation (SACs) Assessments (APP-032) is resolved and closed.
REP1-056.156	2.3 Fish and Shellfish 193. NRW (A) agrees that the data collected through the site-specific surveys and through the desktop review of existing literature and data sources are sufficient to appropriately characterise the fish ecology for the project.	The Applicant welcomes NRW's response and agreement that this matter is resolved.
REP1-056.157	194. With the exception of comments made at 2.3.1 – 2.3.4 below, and supported in Annex C, we agree with the assessment methodology and conclusions for impacts to fish.	The Applicant welcomes NRW's response and has responded to specific points raised below (REP1-056.159 to REP1-056.173).
REP1-056.158	195. We agree with the screening undertaken in the HRA Screening report (document reference E1.4 [APP-034]) and the subsequent Stage 2 assessment (document reference E1.2 [APP-032]) and agree with the overall conclusion of no risk of an adverse effect on the integrity of diadromous fish features from the Welsh protected sites; Dee Estuary/Aber Dyfrdwy SAC, River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC, and Afon Gwyrfai a Llyn Cwellyn SAC.	The Applicant welcomes NRW's response and agreement that this matter is resolved.
REP1-056.159	2.3.1 Impacts to Cod High Intensity Spawning habitat from Underwater Noise - Piling 196. In RR-011 we advised that we disagreed that the impact to cod high intensity spawning habitat - as a result of disturbance from underwater noise - could be assessed 'alone' as minor. Instead, we advised that by adopting the same approaches applied for herring, that the impact should be assessed as moderately adverse during the breeding season.	NRW (A)'s position is noted by the Applicant. The Applicant acknowledges the risk of adverse effects to cod spawning at the mapped high intensity spawning ground in the east Irish Sea with regards to piling during the cod spawning period of January to April (Coull *et al.*, 1998; Ellis *et al.*, 2012). This is reflected in the predicted moderate adverse effect to cod at this mapped high intensity spawning ground during the spawning season concluded in Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) for the Mona Offshore Wind Project cumulatively with other projects and plans (due to increased areas of ensonification should multiple projects undertake piling at the same time), which is significant in EIA terms.

Reference	Written Submission Comment	Applicant's response
		As a result of this predicted significant cumulative effect to cod as a result of piling activities, the Applicant has committed to development of an Underwater Sound Management Strategy (UWSMS). An Outline UWSMS (APP-202) was provided as part of the development consent order Application. The purpose of this strategy is to apply the mitigation hierarchy, from design refinement to the application of additional measures (such as temporal management of piling, or the application of measures such as Noise Abatement Systems), where required, with stakeholder input on the measures to be adopted to manage the effects of underwater sound to non-significant levels to ensure no residual significant effect. Whilst the UWSMS is proposed to manage the predicted significant cumulative effects of underwater sound to spawning cod as a result of the Mona Offshore Wind Project with other projects and plans (and other relevant species), any measures implemented will be designed to manage the contribution to cumulative effects from the Mona Offshore Wind Project only. As such, the UWSMS will likewise further reduce the minor adverse effects to spawning cod predicted as a result of the Mona Offshore Wind Project alone. The Applicant does not consider it appropriate to apply the same approach as was used in the assessment for herring for the Mona Offshore Wind Project alone to cod, due to the discrete and highly substrate-specific nature of herring spawning grounds, versus the broad area available for spawning of cod within the east Irish Sea. The key risk to cod is considered to be through cumulative underwater sound, increasing the areas of spawning habitat which may be subject to ensonification, thereby reducing the available spawning habitat throughout the east Irish Sea, as outlined within the assessment pr esented in Volume 2, Chapter 3: Fish and shellfish ecology (APP-055).
REP1-056.160	197. We have considered the Applicant's response to the matter as detailed in PDA-008 (section RR-011.41). However, our position on the Applicant's assessment of the impacts of underwater noise on cod remains unchanged. The Applicant argues that the degree of overlap with mapped spawning grounds is not used to underpin the assessment but is considered to support expert judgement alongside other parameters. This, it notes, is due to mapped	The Applicant acknowledges NRW (A)'s position and Annex C of NRW (A)'s Written Representation (REP1-056.407). With regards to the temporal nature and intermittency of the impact referenced within Annex C, whilst piling is predicted to be undertaken over a maximum of 114 days, across a two-year piling phase. The maximum design scenario and assessment is based on construction activities potentially occurring during the cod spawning period, but for practical

Reference	Written Submission Comment	Applicant's response
	spawning grounds not reflecting hard boundaries. The Applicant asserts that a number of factors are considered when defining the magnitude of impact, including the consideration of the maximum area of overlap with mapped high intensity spawning grounds. In Annex C, we have provided supporting information to the positions put forward by the Applicant at RR-011.41 for the ExA's and Applicant's consideration.	purposes it is considered highly unlikely that much of this activity will be undertaken during the cod spawning period of January to April, or the reported historic peak of February to March (Coull *et al.*, 1998), given operational constraints resulting from weather conditions during the winter period. Further, 114 days represents approximately 15% of the two-year piling phase, with piling not expected to be undertaken continuously, nor continually at full power, with intermittent periods of no piling activity expected. The Applicant acknowledges the sensitivity of cod to underwater sound effects (which is defined as "high" in Volume 2, Chapter 3: Fish and shellfish ecology (APP-055)), however based upon a proportionate assessment of the magnitude of the impact (concluded as "low" as outlined in the Applicant's Response to Relevant Representations (PDA-008), in response to RR-011), the overall conclusion of significance is considered minor adverse for the project alone. The Applicant has predicted a potential moderate adverse effect to cod at the east Irish Sea mapped high intensity spawning ground during the spawning season in Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) for the Mona Offshore Wind Project cumulatively with other projects and plans (due to increased areas of ensonification should multiple projects undertake piling at the same time), which is significant in EIA terms. Please refer to the Applicant's response to REP1-056.159 for further details with regards to the Applicant's proposed approach to manage the effects of underwater sound to non-significant levels.
REP1-056.161	198. Taking into consideration both the spawning behaviour exhibited by cod, and their known hearing sensitivity and vulnerability to anthropogenic noise (including piling impacts), we consider the current approach presented by the Applicant is not sufficiently precautionary to fully assess the impacts of underwater noise to cod.	Please see the Applicant's response to REP1-056.159.
REP1-056.162	199. We continue to advise that the Applicant should reassess the impacts to cod in line with the methods applied for herring.	Please see the Applicant's response to REP1-056.159.
REP1-056.163	200. NRW (A) does not agree with the Applicant that a duration of 114 days for predicted piling over a 2-year period can be considered an intermittent impact. Although the noise produced is	Please see the Applicant's response to REP1-056.160.

Reference	Written Submission Comment	Applicant's response
	temporary in nature, the impact is not, with the potential to directly affect two years/ two spawning cohorts of the species, with indirect impacts for subsequent cohorts. We advise that restricting piling activity to outside of the peak spawning activity period (February and March) is necessary in order to mitigate the impacts of the proposed development on cod species. This can be secured through the UWSMS, which is to be conditioned as part of the dML and advised to be conditioned as part of the standalone Marine Licence.	
REP1-056.164	2.3.2 Approaches used for Herring and Cod – noise thresholds 201. The overlap with noise impacts on Herring spawning ground has been calculated using 135db threshold [APP-055], as a precautionary approach, which is welcomed. This advice was based on a study by Hawkins et al. (2014), showing behavioural responses by sprat and mackerel to piling sounds including break up of school formations.	The Applicant welcomes NRW's response.
REP1-056.165	202. The proposed approach for Cod uses a noise impact threshold of 160db [APP-055]. Using this threshold, which NRW (A) does not consider to be precautionary, the proportion of high intensity spawning ground overlapped with modelled noise impact zones is greater than 20% for the project alone.	The threshold level of 160 dB re 1µPa SPL_{pk} used for the assessment of behavioural effects to cod from underwater sound is drawn from multiple studies for fish of various Groups (1 to 4, according to Popper *et al.*, 2014; e.g. Pearson *et al.*, 1994; McCauley *et al*., 2000; Fewtrell and McCauley, 2012, please see paragraph 3.9.3.42 to 3.9.3.45 of Volume 2, Chapter 3: Fish and shellfish ecology; APP-055), as opposed to reliance on a single study (Mueller-Blenkle *et al*., 2010). Whilst Mueller-Blenkle *et al*. (2010) noted an observable behavioural response in cod at sound levels of 140 dB to 161 dB re 1 µPa SPL_{pk}, based upon playback of piling sounds, the study also noted considerable variation in the responses by individual fish and a decrease in responses following multiple exposures to the playback sound. It should also be noted that this study is based upon tank-reared caged fish as opposed to free-swimming individuals, therefore the application of these responses to wild fish in their natural environment should be applied with a high degree of caution. Further, measurements were taken at up to 100 m from the playback sound source, therefore extrapolation of this data beyond the measured distance (i.e. the ranges of kilometres applicable to behavioural effects for the Mona Offshore Wind Project) should be interpreted with caution due to changes in the way sound is perceived at greater distances from the source, with

Reference	Written Submission Comment	Applicant's response
		impulsive sounds transforming to non-impulsive sounds as they propagate away from the source (Martin *et al.*, 2020). The approach to assessment of behavioural effects to cod in Volume 2, Chapter 3: Fish and shellfish ecology (APP-055), using a threshold level of 160 dB re 1µPa SPL_{pk} has been presented and discussed during the second Expert Working Group Meeting (EWG) in November 2022 and the third EWG in March 2023 (Consultation report; APP-037), and was used to support assessment of behavioural effects to cod in the Preliminary Environmental Information Report (Mona Offshore Wind Ltd., 2023); no objections to the use of this metric or threshold were raised by members of the EWG. The Applicant acknowledges that the underwater sound modelling for the project alone, based upon a behavioural threshold of 160 dB re 1µPa SPL_{pk} using the maximum potential hammer energy overlaps with 21.64% of high intensity cod spawning ground. As outlined within the Applicant's Response to Relevant Representations (PDA-008), in response to RR-011, this has been considered in the context of available spawning habitat within the region, the intermittency and short-term nature of piling activity (which is unlikely to overlap the entirety of the cod spawning period, due to operational constraints) and the degree of reversibility of the impact. This has therefore resulted in the magnitude of impact being defined as low. The sensitivity of cod to underwater sound effects is considered high. The Applicant therefore considers the threshold of 160 dB re 1µPa SPL_{pk} sufficiently precautionary to assess the risk of potential behavioural effects to spawning cod. This is reflected in the predicted potential moderate adverse effect to cod during the spawning period due to underwater sound from piling from the Mona Offshore Wind Project cumulatively with other projects and plans within Volume 2, Chapter 3: Fish and shellfish ecology (APP-055). This is proposed to be managed through the development of an UWSMS, an Outline of which is provided with the Application (APP-202). The purpose of this strategy is to apply the mitigation hierarchy, from design refinement to the application of additional measures, where required, with stakeholder input to manage the effects of underwater sound to non-significant levels to ensure no residual significant effect.

Reference	Written Submission Comment	Applicant's response
		Whilst the UWSMS is proposed to manage the predicted significant cumulative effects of underwater sound to spawning cod as a result of the Mona Offshore Wind Project with other projects and plans (and other relevant species), any measures implemented will be designed to manage the contribution to cumulative effects by the Mona Offshore Wind Project only. As such, the final UWSMS will likewise further reduce the minor adverse effects to spawning cod predicted as a result of the Mona Offshore Wind Project alone.
REP1-056.166	203. Cod displayed a variety of behavioural reactions to piling noise at sound levels measured from 140db re 1 µPa Peak in one study (Mueller-Blenkle et al. 2010), including freezing and changing direction, and altering swimming speed. Whilst this study was not intended to show a threshold for noise related impacts on the species, it does show an indication that piling noise from 140db may have an impact on Cod. During the sensitive spawning period for the species in which sound and hearing play a pivotal role in their behaviour and activities, this could have an adverse impact on the species.	Please see the Applicant's response to REP1-056.165.
REP1-056.167	204. NRW (A) advises that the Applicant runs the 140db threshold through the noise model so that the impact on spawning Cod can be fully assessed. We consider this threshold is more appropriate for Cod during their sensitive spawning period and would display a more accurate extent of the area impacted by piling noise.	Please see the Applicant's response to REP1-056.165. The Applicant considers the threshold of 160 dB re 1µPa SPL_{pk} sufficiently precautionary to assess the risk of potential behavioural effects to spawning cod. This is reflected in the predicted potential moderate adverse effect to cod during the spawning period due to underwater sound from piling from the Mona Offshore Wind Project cumulatively with other projects and plans within Volume 2, Chapter 3: Fish and shellfish ecology (APP-055).
REP1-056.168	2.3.3 Sound exposure levels for assessing impacts 205. NRW (A) noted in its Relevant Representation [RR-0.11] that the Applicant had been advised to use the Popper et al. (2014) Sound Exposure Guidelines to assess impacts from underwater noise, and specifically that sound levels from impact piling were described using Cumulative Sound Exposure Levels (SELcum) in order to reflect the cumulative exposure from the total piling event. We noted in RR-011 that we consider the SELcum threshold is likely to be lower than the Peak Sound Pressure Levels (SPLpk) used to assess the percentage of cod spawning habitat affected and therefore the 21.64% presents a potential underestimate of the	The Popper *et al.* (2014) criteria for behavioural effects to fish is qualitative only, and not based upon specific sound thresholds (based upon risks in the near, intermediate and far fields), as presented within Table 3.27 of Volume 2, Chapter 3: Fish and shellfish ecology (APP-055). The 21.64% overlap with the mapped high intensity cod spawning ground presented within Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) is based upon a behavioural threshold of 160 dB re 1µPa SPL_{pk}. The use of specific metrics for behavioural assessment is derived from the available peer-reviewed literature, and a wide range of studies are based around the use of the SPL_{pk} metric. As outlined above, there is no SEL_{cum}

Reference	Written Submission Comment	Applicant's response
	area ensonified. We note the Applicant's response to this matter in PDA-008, section RR-011.42. Whilst the Applicant has provided some narrative around their approach, we remain unclear on some of the points raised. It is our understanding that owing to the nature of what is being measured, SPLpk (peak levels) and SELcum (a sum of the level over multiple piles) cannot be directly compared given they are different metrics and can't be converted between the two. As such we are not clear on the validity of the argument on the use of SPLpk data as compared to SELcum data, as a precautionary measure. We advise that further clarity is provided by the Applicant on this matter.	threshold defined for behavioural effects in Popper *et al.* (2014), or other information sources relating to impacts to fish and shellfish receptors, therefore the SPL_{pk} metric is considered the most appropriate for the assessment of potential behavioural effects to cod. Injury ranges for cod, based upon the thresholds outlined within Popper *et al.* (2014), are presented as Mortality, Recoverable Injury and Temporary Threshold Shift (TTS) in Table 3.21 (SPL_{pk}), 3.22 (SEL_{cum}), 3.23 (SEL_{cum}), 3.24 (SEL_{cum}) and 3.25 (SEL_{cum}) of Volume 2, Chapter 3: Fish and shellfish ecology (APP-055). These are based upon physiological injury are therefore not considered suitable for use as a proxy for behavioural effects. Visual representations of the SEL_{cum} ranges for Mortality, Recoverable Injury and TTS, drawn from the SEL_{ss} contour data are shown in Figure 3.9 and Figure 3.11 of Volume 2, Chapter 3: Fish and shellfish ecology (APP-055).
REP1-056.169	206. The Applicant also states that SELcum is derived from SELss, again it is not clear how this was done as each measure different aspects of the noise level. We advise that a clearer explanation is provided by the Applicant. This would allow NRW (A) to fully understand and therefore advise further and provide a more accurate opinion of the noise modelling approaches adopted.	The contour decibel levels presented in Figure 3.8, 3.9, 3.10 and 3.11 of Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) are derived from the contours generated for the single strike sound exposure level (SEL_{ss}) metric to provide a visual representation of the relevant cumulative sound exposure level (SEL_{cum}) thresholds. This is based upon the injury ranges (Temporary Threshold Shift; TTS, recoverable injury and mortality) outlined within Table 3.22, 3.23 and 3.24 of Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) for Group 3 and 4 fish, drawn directly from Volume 5, Annex 3.1: Underwater sound technical report (APP-079). The SEL_{ss} contour decibel values are included within Figure 3.8, 3.9, 3.10 and 3.11 of Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) for transparency.
REP1-056.170	2.3.4 Underwater Sound Management Strategy (UWSMS) 207. We welcome the commitment that that the UWSMS will be secured within the dML and standalone ML [PDA-008; RR-011.43] but we reiterate that the strategy will need to continue to be developed to continue to ensure it is fit for purpose - particularly with reference to cod. We note that the outline UWSMS (section 1.8.2.6 [APP-202]) includes potential spatial and temporal phasing measures relating to herring but it currently does not include specific measures relating to Cod. We advise that Cod should be explicitly considered and included as a receptor within the strategy, also requiring mitigation measures to ensure that the Irish Sea	The Outline UWSMS (APP-202) submitted with the Application provides an overview of a number of options for measures which will be investigated through the application of the mitigation hierarchy. These measures are not fixed and are used to provide examples only, including with reference to herring. Other measures may be investigated where deemed appropriate, and if required. The risks to spawning cod are explicitly acknowledged within Table 1.4 of the Outline UWSMS (APP-202), and specific measures to support the management of cumulative effects to cod to non-significant will be developed post-consent, in consultation with stakeholders, including NRW

Reference	Written Submission Comment	Applicant's response
	population is not adversely impacted from piling and other noisy activities during the sensitive spawning period. See our expanded comments above and in Annex C regarding noise impacts to Cod.	(A) as part of the final UWSMS. Construction will not commence without approval the final UWSMS by the licencing authority. Whilst the UWSMS is proposed to manage the predicted significant cumulative effects of underwater sound to spawning cod as a result of the Mona Offshore Wind Project with other projects and plans (and other relevant species), any measures implemented will be designed to manage the contribution to cumulative effects by the Mona Offshore Wind Project only. As such, the UWSMS will likewise further reduce the minor adverse effects to spawning cod predicted as a result of the Mona Offshore Wind Project alone. The Applicant will be pleased to continue to engage with NRW (A) to further develop the UWSMS. The Applicant proposes that any amendments to the Outline UWSMS (APP-202) are agreed upon and carried through to be implemented post-consent, when the final design and construction parameters are available.
REP1-056.171	208. NRW (A) strongly encourages the Applicant to continue to engage with us in developing the strategy during the examination (as far as is reasonable and appropriate) and post-consent. Providing the UWSMS is properly developed with NRW (A) and achieves the aims of reducing the impact of noise on both herring and cod spawning, then additional validation monitoring of the impacts of the Mona project should not be required.	The Applicant welcomes NRW's response and will continue to engage with NRW (A) regarding the UWSMS.
REP1-056.172	209. In addition, embedded mitigation approaches proposed such as the use of soft start and ramp up procedures have limited evidence that support their effectiveness in reducing noise disturbance impacts to fish, which is NRW (A)'s primary concern for spawning cod. We would welcome further discussion with the Applicant on this matter.	The Applicant notes NRW 's position. The Applicant has stated within Table 3.19 of Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) that these measures may benefit "some" species of fish, given that fish is such a broad group of organisms, and acknowledge that these measures may not be of benefit to all fish species. This has been considered when assessing the impacts of underwater sound to fish and shellfish ecology receptors.
REP1-056.173	210. NRW (A) welcomes the commitment to secure the UWSMS in the dML and advise that it is also secured in the standalone ML. NRW (A) will need to be consulted, in writing, on the suitability of the UWSMS.	The Applicant welcomes NRW's response and will continue to consult NRW (A) regarding the UWSMS.
REP1-056.174	2.3.5 Inconsistencies with the application 211. NRW (A) raised inconsistency issues with the application as noted in PDA-008 section RR-011.44. These inconsistencies	The Applicant welcomes NRW's response and confirmation that this matter is closed. Volume 1, Chapter 3: Project description (APP-050) provides the maximum key parameters for the Mona Offshore Wind Project, it does not

Reference	Written Submission Comment	Applicant's response
	related to the presentation of the worst-case scenario for Offshore Substation Platforms (OSPs) in the application. The Applicant's response to this concern at RR-011.44 is lacking, however we note that it is explained more clearly in response to a similar matter raised under the marine mammal section (see RR-011.32 of PDA-008 and 182 above). Given the explanation provided for marine mammals, we are now content that the worst-case scenario for OSPs has been presented in relation to impacts on fish receptors. We do, however, advise that the project description and, where appropriate the relevant chapters, are updated to reflect this.	provide the maximum design scenario for each EIA topic, these are presented in the relevant topic chapters, in this case Volume 2, Chapter 3: Fish and shellfish ecology (APP-055). Therefore, no changes to Volume 1, Chapter 3: Project description (APP-050) are required.
REP1-056.175	2.3.6 Future Monitoring 212. Paragraph 2.3.8 of our Relevant Representation [RR-011] encouraged the Applicant to further consider future monitoring to inform the baseline of future projects and their alone and in-combination assessments. This was raised by NRW (A) as a direct result of information provided in the application at sections 1.5.4.10 of APP-186 and 3.11.9.1 of APP-055. We also noted in our Relevant Representations that such future monitoring is not essential to the project - as mitigation measures are proposed by the Applicant to manage potential impacts to an acceptable level (which will be delivered via the UWSMS). It is therefore not surprising to note the response of the Applicant at RR-011.45 in PDA-008 which notes that given the commitment to an UWSMS that future monitoring is not required for the project or considered necessary to test the predictions of the impact assessment. Whilst it is unfortunate that the Applicant will not further consider future monitoring, we understand and acknowledge this response. NRW (A) has no further comments to make on future monitoring to inform baseline. Should the Applicant change their position on monitoring to inform baseline of future projects, then NRW (A) would be happy to discuss approaches further with the Applicant.	The Applicant welcomes NRWs response and confirmation that this comment is closed.
REP1-056.176	2.4 Physical Processes 213. NRW (A) agrees that the baseline description of physical processes through the desktop review of existing literature and existing data sources, project specific surveys and numerical	The Applicant notes and welcomes NRW's response.

Reference	Written Submission Comment	Applicant's response
	modelling baseline scenarios are sufficient to appropriately characterise the study area (Array Area, Export Cable Corridor).	
REP1-056.177	214. NRW (A) agrees with the Numerical modelling approach and scenarios conducted in relation to hydrodynamics, waves and sediment transport to inform the potential changes on Constable Bank, Menai Strait and Conwy SAC and the adjacent coast arising from the construction, operation and decommissioning of Mona Offshore Wind Farm.	The Applicant notes and welcomes NRW's response.
REP1-056.178	215. Our Relevant Representation [RR-011] acknowledged the commitment of the Applicant to the development of, and adherence to, an Offshore Construction Method Statement (CMS) including a cable specification and installation plan (CSIP) detailing the commitments to minimise the potential impacts to Constable Bank (an Annex 1 habitat outside of an SAC), the habitats and species within the Menai Strait and Conwy Bay SAC and the intertidal area between Mean High Water Springs (MHWS) and Mean Low Water Springs (MLWS). NRW (A) requested that it should be consulted on the suitability of the offshore CMS ahead of commencement of activities. We therefore welcome the commitment made in PDA-008 (section RR-011.49) that confirms the Applicant's intention that NRW will be consulted in writing on the offshore CMS. However, we note that Condition 18(1)(d), Part 2, Schedule 14 of the dDCO (C1 Draft Development Consent Order F03) [PDA-003] requires the undertaker to submit an offshore CMS to the licensing authority for approval in writing prior to commencement of the authorised scheme. We note that NRW (A) are not specifically listed (please also see comments 2.10.1 below) as a consultation body and request that we are consulted, in writing, on the suitability of the offshore CMS prior to commencement of activities. We advise that this condition is also captured in the standalone ML.	The Applicant notes NRW's response and will continue to consult NRW with regard to the Offshore Construction Method Statement. Regarding inclusion of NRW (A) as a named consultee, as NRW (A) are part of the licencing authority organisation (NRW) for the deemed marine licence within the Draft Development Consent Order (Document Reference C1 F04) and the standalone marine licence, it is not necessary to specifically refer to NRW (A) as it is assumed that NRW (A) will review all documents requiring approval by the licencing authority as agreed within NRW marine licencing team.
REP1-056.179	216. NRW (A) welcome the confirmation that no cable protection will be installed within Constable Bank (section RR-011.50: PDA-008] and that the wording in paragraph 1.5.2.28 of APP-186 was an error, we welcome the confirmation that this is secured through the offshore CMS. As above, we note that NRW (A) are not listed as a consultation body and request that we are consulted, in	

Reference	Written Submission Comment	Applicant's response
	writing, on the suitability of the offshore CMS prior to commencement of activities. We advise that this condition is also captured in the standalone ML.	
REP1-056.180	217. NRW (A)'s relevant representation [RR-011], requested clarification from the Applicant as to whether cable protection would be required on the Horizontal Directional Drill (HDD) exit pits and if it was the case that cable protection was required, then we advised that the potential impacts to physical processes would require assessment. The Applicant has responded [RR-011.51 PDA-008] by stating that up to 4 exit pits would be located seawards of MLWS and that, as with other remedial cable protection, cable protection at the exit pits would be avoided wherever possible. The Applicant further notes that that in the event that the export cable exit pits (seaward of MLWS) required cable protection in the form of mattressing or rock bags, the width and height of the cable protection at the exit pits would be subject to the same commitments as for the whole Mona Offshore Cable Corridor.	Please refer to the Applicant's response to REP1-056.182. which details the provision of cable protection in shallow water.
REP1-056.181	218. We have further reviewed ES Volume 2, Chapter 1: Physical processes [APP-053] and Volume 6, Annex 1.1: Physical processes technical report [APP-086], and note that the numerical modelling conducted to determine the impact to physical processes caused by cable protection, included the Offshore windfarm array scour protection, and a short section of cable protection along the offshore cable corridor offshore of Constable Bank (see sections 1.3.66 and 1.3.6.8) - all of which were in deep water. The modelled outputs showed very small changes to the currents and waves and therefore concluded (based on the findings) that there would be no interaction with the shoreline or nearshore banks and morphology.	The modelling undertaken and presented in Volume 6, Annex 1.1: Physical processes technical report (APP-086), used an indicative layout and applied cable protection in regions where trenching may potentially be more difficult (i.e. in the vicinity of moraines comprised glacial till) and where inter-array cable connects with generating assets. The offshore export cable protection was applied with a height of 3 m and 10 m width with cable crossings 3 m in height, 30 m width and 50 m length in these areas. This was considered to be the Maximum Design Scenario as it applied the maximum cable protection height in a realistic situation. Shallow water cable protection was not included in the model as this is both far less likely and changes in bed level to a maximum of 5% of water depth (see REP1-056.182. below) would be indistinguishable from the natural seabed variation within the context of model discretisation in these areas.
REP1-056.182	219. However, NRW (A) reiterates that no physical processes assessment has specifically been carried out to determine how placement of cable protection in the shallow nearshore environment, so close to the coast, would impact on the coastal processes (including any potential changes to bathymetry and wave transformation processes). In the event that cable protection	The Applicant is committed to development and adherence to an Offshore Construction Method Statement including a Cable Specification and Installation Plan (CSIP) which will include cable burial where possible and cable protection (as per the Mitigation and Monitoring Schedule (J10 F02)). The Applicant recognises that the best form of cable protection is achieved through cable burial to the required depth and it is not the Applicants

Reference	Written Submission Comment	Applicant's response
	is to be placed over the four exit pits in the nearshore, NRW (A) continue to advise that consideration should be given to the obstruction to the bedload sediment transport pathways both alongshore and onshore/offshore, and the potential impact on wave diffraction and wave refocussing on the coast, to ensure that the assessment of physical process is as complete and robust as possible. Until an assessment has been made, NRW (A) are not able to provide further advice with respect to either the extent of any potential concerns in the nearshore environment, or any proposed or possible mitigation and monitoring measures, including cable protection.	intention to place cable protection in shallow water but to avoid this if at all possible. The Applicant is also committed to ensure that no more than a 5% reduction in water depth (referenced to Chart Datum) will occur at any point along the Mona offshore cable corridor without prior written approval from the Licensing Authority in consultation with the MCA (commitment secured as above). The Applicant has confirmed in its response to RR-011.53 of the Applicant's Response to Relevant Representations (PDA-008), that the height of the cable protection above the seabed may be altered in relation to the given water depth at any point along the export cable corridor in order to adhere to the commitment, ensuring that any cable protection is sufficiently low profile to cause minimal changes to wave, tide and sediment transport. Thus, implicitly the detailed design (either by location, installation methodology or type of cable protection) will ensure there are no significant impacts. Geotechnical site investigations were undertaken in 2022 and 2023 and confirmed that the Mona Offshore Cable Corridor is dominated by circalittoral sediments (as per paragraph 1.5.1.22 of Volume 2, Chapter 1: Physical processes (APP-053) therefore in shallow waters, inshore of the Constable Bank, cable trenching and burial may be undertaken and the laying of cables directly on the seabed with the associated cable protection would not be required. Only in the specific case where the full target burial depth cannot be achieved would cable protection be needed. In this case, where cables are installed below the bed level, cable protection measures will be tailored to the specific location to ensure that sediment transport continues unhindered and the wave climate is not notably altered, i.e. adherence to the commitment, ensuring that any cable protection is sufficiently low profile to cause minimal changes to wave, tide and sediment transport. For example, this may include provision of concrete mattressing typically 0.3 m in height overlaying the cable and completely or partially buried within the trench. Additionally, the Applicant is committed to conduct a detailed Cable Burial Risk Assessment and Burial Assessment Study, which will be included within the CSIP prior to cable laying and which will confirm the locations requiring cable protection along the cable corridor and outline the measures to be taken to ensure adherence to the commitments.

Reference	Written Submission Comment	Applicant's response
REP1-056.183	220. NRW (A) welcomes the use of HDD at landfall to minimise the environmental impact of trenching on conservation features in the intertidal area between MHWS and MLWS. We also welcome that no maintenance works will be undertaken in the intertidal zone during the operations and maintenance phase. We advise that the design and installation of the cable to landfall should take account of the natural envelope of beach profile change and the future erosion of the backshore. It is fundamental that the depth of installation across the intertidal is sufficient to minimise any future risk of exposure over the life of the windfarm due to short-term beach draw-down during storms or long-term beach erosion. NRW (A) acknowledge as documented at RR-011.52 in PDA-008 that geotechnical site investigations were undertaken in 2022 and 2023 to confirm the technical feasibility of, and commitment made to, the use of trenchless techniques under the intertidal area as set out in section 1.4 of the Outline Landfall Construction Method Statement (LCMS) [APP-226]. NRW (A) note that further detailed onshore and offshore geotechnical investigations will be conducted at the landfall, including establishing the depth of burial requirements to avoid the risk of exposure. Details of the final design will be included within the final LCMS submitted to the relevant planning authority following consultation with NRW as secured in Schedule 2, Requirement 9 of the draft DCO (C1 Draft Development Consent Order F03). NRW (A) request that they are consulted, in writing, with respect to the final LCMS ahead of commencement of activities. Whilst we note the commitment to securing trenchless techniques in the intertidal is made in the Marine Licence Principles document [PDA-005], we do not consider that the commitment is explicit enough in the detail provided and advise that this is rectified. This will also be important for the detail of the standalone ML.	The Applicant notes NRW's response and will continue to consult NRW regarding the Landfall Construction Method Statement. The commitment to the use of trenchless techniques at the landfall is secured through the Outline landfall construction method statement (APP-226) which provides outline details on the commitment. As secured in Schedule 2, Requirement 9 of the draft DCO (C1 Draft Development Consent Order F04), the final Landfall Construction Method Statement will be submitted to the relevant planning authority following consultation with NRW. The Marine Licence Principles document (Document Reference J9 F03) does not secure commitments. It is provided to assist interested parties with understanding how the deemed and standalone marine licences are intended work together.
REP1-056.184	221. NRW (A) acknowledges the commitment of the Applicant to conduct a detailed Cable Burial Risk Assessment and Burial Assessment Study, which will be included within the CSIP prior to cable laying and which will confirm the locations requiring cable protection along the cable corridor. NRW (A) acknowledges the commitment that no more than 5% reduction in water depth	The Applicant notes the response and will continue to consult NRW regarding the Cable Specification and Installation Plan.

Reference	Written Submission Comment	Applicant's response
	(referenced to Chart Datum) will occur at any point along the Mona offshore cable corridor without prior written approval from the Licensing Authority in consultation with the Maritime Coastguard Agency (MCA). NRW (A) previously queried whether this commitment means that the height of the cable protection above the seabed will be altered in relation to the given water depth at that point along the export cable corridor. The Applicant has confirmed at section RR-011.53 of PDA-008 , that the height of the cable protection above the seabed may be altered in relation to the given water depth at any point along the export cable corridor in order to adhere to the commitment, ensuring that any cable protection is sufficiently low profile to cause minimal changes to wave, tide and sediment transport. We welcome that the Applicant is committed to ensure that no more than a 5% reduction in water depth (referenced to Chart Datum) will occur at any point along the Mona offshore cable corridor without prior written approval from the Licensing Authority in consultation with the MCA. This commitment is secured within the dML in Schedule 14 of the draft DCO (C1 Draft Development Consent Order F03) and also suggested for inclusion in the standalone ML Marine Licence (see the draft Marine Licence Principles Document (APP-195)). We agree with the inclusion of this commitment in the standalone ML. NRW (A) reiterate that we will need to be consulted in writing on these matters.	
REP1-056.185	222. Our Relevant Representation [RR-011] requested that consideration should be given to sandwave recovery monitoring to be included in post-installation surveys, particularly on Constable Bank. This suggestion was promoted in order to validate the assumptions made in the ES that sandwave reformation would occur within months given the active sediment transport in the study area and the availability of recharge material. The MDS for sand wave clearance in Mona Array and cable corridor amounts to 14,541,497m3 and of that 1,504,000m3 of sediment displacement occurring in the offshore cable corridor. We acknowledged that in all cases, the material cleared from the sandwave will be sidecast allowing the sediment to be readily available for supply for sandwave recovery. We further acknowledged that sandwave	The Applicant has noted that no significant effects on physical process receptors were predicted in Volume 2, Chapter 1: Physical processes (APP-053), and therefore, no specific monitoring is considered to be required to test the predictions of the EIA. However, in line with the Offshore in-principle monitoring plan (APP-201), monitoring will be undertaken to observe the effect of sediment transport and sediment transport pathways on cable burial. This is secured under condition 18 in Schedule 14 of the Draft DCO (Document Reference C1 F04).

Reference	Written Submission Comment	Applicant's response
	reformation will depend on a range of factors including the size, location and alignment of any breach with respect to the sediment transport pathways and available recharge material. We noted that whilst we recognised that monitoring is not essential, given the active sediment transport in the study area and the availability of recharge material, consideration should be given to sandwave recovery monitoring in the post installation surveys, particularly on Constable Bank. This, we argued, would support statements that sandbanks will recover in the short-term as well as help inform future work. The Applicant has responded by stating that as no significant effects were predicted in the EIA, no further monitoring is considered to be required to test the predictions of the EIA [PDA-008, RR-011.54]. NRW (A) acknowledges the Applicant's response, however, we retain our recommendation that consideration should be given to sandwave recovery monitoring for the reasons outlined above particularly with respect to informing future work.	
REP1-056.186	223. With respect to sediment removal for the purpose of ballast for gravity-based foundations, NRW (A) are satisfied that the sediment removal is not likely to indirectly have an impact on designated features within Welsh Water jurisdiction. NRW (A) acknowledges in RR-011.55 [PDA-008] that the Applicant notes and welcomes NRW (A)'s response. We defer to JNCC for further detailed advice on this on matter.	The Applicant notes NRW's response.
REP1-056.187	2.5 Benthic Subtidal and Intertidal Ecology 224. NRW (A) agrees the data collected through the site-specific surveys and through the desktop review of existing literature and data sources are sufficient to appropriately characterise the benthic ecology in the export cable corridor.	The Applicant notes NRW's response.
REP1-056.188	225. NRW (A) agrees with the conclusion of the Information to Support an Appropriate Assessment (ISAA [APP-032]) that provided the mitigation measures outlined are adhered to, the project will not have an AEoSI and therefore will not undermine the conservation objectives of the benthic designated features of the Menai Strait and Conwy Bay SAC.	The Applicant notes NRW's response.

Reference	Written Submission Comment	Applicant's response
REP1-056.189	226. NRW (A) advises Table 1.220 Summary of conclusions [APP-032], is revised as there are a number of impacts summarised in this table such as Electro Magnetic Fields (EMF) that have not been assessed but are included here. Please note we agree that impacts from EMF should not be scoped into the assessment as the Mona Offshore Cable corridor and Access Areas does not overlap with any Annex I features of the Menai Strait and Conwy Bay SAC.	Table 1.220 has been reviewed and the Applicant agrees that EMF should be removed from this table in relation to the Menai Strait and Conwy Bay SAC. This change has been added to the Mona errata document (S_PD_1 F03). The Applicant, however, notes that NRW are in agreement that EMF should not be scoped into the Stage 2 ISAA Part Two: Special Areas of Conservation (SACs) Assessments (APP-032).
REP1-056.190	227. NRW (A) noted in its Relevant Representation [RR-011] that it was unclear whether cable protection would be required on the Horizontal Directional Drilling (HDD) exit pits, and further noted that, should cable protection at the exit pits be required, then an assessment of the potential impacts to benthic and intertidal ecology would need to be made. Following consideration of the Applicant's response to NRW (A)'s Relevant Representations [PDA-008 – sections RR-011.51 / RR-011.58], we continue to request clarification with respect to the location of cable protection in the nearshore zone close to Mean Low Water Springs (MLWS), and whether it is the Applicant's intention to place cable protection at the exit pits in shallow water. The impact to benthic ecology caused by the presence of cable protection in the shallow water nearshore zone has not been assessed, particularly in relation to effects resulting from subsequent potential changes to physical processes (wave transformation processes, sediment transport and deposition). Until an assessment has been made, NRW (A) are not able to provide further advice with respect to either the extent of any potential concerns in the nearshore zone, or any proposed or possible mitigation or monitoring measures, including cable protection.	As outlined in the Applicant's response to REP1-056.182, the Applicant is committed to development and adherence to an Offshore CMS including a Cable Specification and Installation Plan (CSIP) which will include cable burial where possible and cable protection (included in the Mitigation and Monitoring Schedule (J10 F02)). The Applicant recognises that the best form of cable protection is achieved through cable burial to the required depth and it is not the Applicant's intention to place cable protection in shallow water but to avoid this if at all possible. The Applicant is also committed to ensure that no more than a 5% reduction in water depth (referenced to Chart Datum) will occur at any point along the Mona offshore cable corridor without prior written approval from the Licensing Authority in consultation with the MCA. The Applicant has confirmed at section RR-011.53 of PDA-008, that the height of the cable protection above the seabed may be altered in relation to the given water depth at any point along the export cable corridor in order to adhere to the commitment, ensuring that any cable protection is sufficiently low profile to cause minimal changes to wave, tide and sediment transport. Thus, implicitly the detailed design (either by location, installation methodology or type of cable protection) will ensure there are no significant impacts.eGeotechnical site investigations were undertaken in 2022 and 2023 and confirmed that the Mona Offshore Cable Corridor is dominated by circalittoral sediments therefore in shallow waters, inshore of the Constable Bank, cable trenching and burial may be undertaken and the laying of cables directly on the seabed with the associated cable protection would not be required. Only in the specific case where the full target burial depth cannot be achieved would cable protection be needed. In this case, where cables are installed below the bed level, cable protection measures will be tailored to the specific location to ensure that sediment transport continues unhindered and the wave climate is not notably altered, i.e. adherence to

Reference	Written Submission Comment	Applicant's response
		the commitment, ensuring that any cable protection is sufficiently low profile to cause minimal changes to wave, tide and sediment transport. For example, this may include the provision of concrete mattressing, typically 0.3 m in height, overlaying the cable and completely or partially buried within the trench. Additionally, the Applicant is committed to conducting a detailed Cable Burial Risk Assessment and Burial Assessment Study, which will be included within the CSIP prior to cable laying and which will confirm the locations requiring cable protection along the cable corridor and outline the measures to be taken to ensure adherence to the commitments. As outlined in the Applicant's response to REP1-056.17, the potential requirement for cable protection at the exit pits (seaward of MLWS) is included within the maximum design scenario assessed for cable protection requirements for the Mona Offshore Cable Corridor (i.e. cable protection for up to 20% of the 360 km of offshore export cables). The impacts to benthic ecology from the presence of cable protection within the Mona Offshore Cable Corridor are assessed in section 2.9.5 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054) for long term habitat loss and section 2.9.9 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054) for changes in physical processes. This included the 'sand and muddy sand communities with polychaetes and bivalves' IEF which includes the biotope found in the nearshore subtidal area of the Mona Offshore Cable Corridor (i.e. the '*Fabulina fabula* and *Magelona mirabilis* with venerid bivalves and amphipods in infralittoral compacted fine muddy sand' biotope) as identified using data from the site-specific surveys.
REP1-056.191	228. NRW (A) request that we are consulted on the relevant plans (Offshore Construction Method Statement [OCMS] and Landfall Construction Method Statement (LCMS) in the post-consent, pre-construction stage, under both the deemed Marine Licence within the DCO, and the standalone Marine Licence.	Condition 18(1)(d), Part 2, Schedule 14 of the dDCO requires the undertaker to submit an offshore CMS to NRW for approval in writing prior to commencement of the authorised scheme. As secured in Schedule 2, Requirement 9 of the draft DCO (C1 Draft Development Consent Order F03), the final Landfall Construction Method Statement will be submitted to the relevant planning authority following consultation with NRW.
REP1-056.192	229. NRW (A) acknowledges the Applicant's response to our Relevant Representations where we advised that the outputs of the	Please see the Applicant's response to REP1-056.183.

Reference	Written Submission Comment	Applicant's response
	physical processes study should be used to ensure that the depth of cable installation across the intertidal is sufficient to minimise future cable exposure. We note at RR-0.11.52 [PDA-008] that the Applicant reconfirms its commitment to the use of trenchless techniques under the intertidal area as set out in the Outline LCMS [APP-226]. We note that the Applicant has also stated that further onshore and offshore geotechnical investigations will be conducted at the landfall, post-consent, including establishing the depth of burial requirements to avoid the risk of exposure. We also note that details of the final design will be included within the final LCMS, and we request that NRW (A) are consulted on the final LCMS prior to submission to the relevant planning authority. Whilst we note the commitment to securing trenchless techniques in the intertidal is made in the Marine Licence Principles document [PDA-005], we do not consider that the commitment is clear enough in the detail provided and advise that this, along with its position in the principles document, is reviewed to provide confidence that this commitment is appropriately secured. This will also be important for the detail of the standalone ML. Furthermore, NRW (A) expect to be consulted, in writing, on this matter.	
REP1-056.193	230. We note the action upon NRW (A) from the ExA as listed in EV3-006a - to advise on the need for monitoring provisions in respect of risk of exposure of landfall cables due to beach profile change, erosion of the backshore and short-term beach draw-down during storms. Until further assessment is provided as per 227 above, we are unable to provide further advice in this regard.	Please refer to the Applicant's responses to REP1-056.15 and REP1-056.190.
REP1-056.194	231. Whilst we agree with the conclusions of the ES that the potential impact from sandwave clearance in Constable Bank is not significant in EIA terms, we noted in our Relevant Representations [para 2.5.5 of RR-011], that consideration should be given to sandwave recovery monitoring during the post-installation surveys in Constable Bank in order to validate the assumptions in the ES. This, we argued, would support statements that sandbanks will recover in the short-term as well as help inform future work. The Applicant has responded by stating that as no significant effects were predicted in the EIA, no further monitoring is considered to be required to test the predictions of the EIA [PDA-008, RR-011.60].	The Applicant notes this recommendation however the Applicant maintains that, as no significant effects were predicted with the EIA, no further monitoring is considered to be required to test the predictions of the EIA (Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054)).

Reference	Written Submission Comment	Applicant's response
	NRW (A) acknowledges the Applicant's response, however, we retain our recommendation that consideration should be given to sandwave recovery monitoring for the reasons outlined above particularly with respect to informing future work.	
REP1-056.195	232. NRW (A) welcomes the clarity provided by the Applicant in PDA-008 [RR-011.61] with respect to the Biosecurity Risk Assessment and Invasive Non-native Species (INNS) Management Plan – that the measures to minimise the potential spread of INNS is secured in a free-standing annex to the offshore EMP and a separate plan to the outline Biosecurity Protocol as part of the Code of Construction Practice (CoCP). We also welcome the commitment that the plans will be secured as part of the dML and standalone ML. We continue to recommend that NRW (A) are consulted, in writing, on the suitability of the plans ahead of commencement of activities. Please also see 2.10.1 below	The Applicant notes your response and will continue to consult NRW.
REP1-056.196	233. We advise that should the intention be to utilise Holyhead Port for berthing of vessels during construction, operation and/or decommissioning, specific management measures may be required in addition to standard biosecurity risk assessment protocols. This is due to the presence of the highly invasive carpet seasquirt Didemnum vexillum within the Port. Notwithstanding this, any specific measures that might be required could be managed via the marine biosecurity risk assessment and management plan.	Please refer to the Applicant's responses to REP1-056.20. The marine biosecurity plan will consider the marine INNS pathway risks associated with vessels once the construction and operation and maintenance ports have been identified and confirmed prior to construction. As outlined in Table 2.19 of Volume 2, Chapter 2: Benthic subtidal and intertidal ecology (APP-054), specific measures will be adopted in the event that a high alert species is recorded (e.g. carpet sea squirt *Didemnum vexillum*).
REP1-056.197	234. NRW (A) welcomes the clarity provided by the Applicant [RR-011.62 of PDA-008] with regards to the Marine Pollution Contingency Plan (MPCP) and Offshore EMP confirming the commitment to pre-commencement consultation with NRW (A) under the DCO conditions, and to securing the Offshore EMP and MPCP within the standalone ML.	The Applicant notes NRW's response.
REP1-056.198	2.6 Marine Water and Sediment Quality (MW&SQ) 235. Following the review of the Applicant's Response to Relevant Representation [PDA-008], RR-011.63, NRW (A) are content that the Offshore EMP and MPCP will be submitted for consultation with JNCC and NRW (A). However, we note that NRW (A) are not specifically listed as a consultation body in the DCO Schedule 14,	The Applicant notes NRWs response. As NRW (A) are part of the licencing authority organisation (NRW) for the deemed marine licence within C1 Draft Development Consent Order F04 and the standalone marine licence, it is not necessary to specifically refer to NRW (A) as it is assumed that NRW (A) will review all documents requiring approval by the licencing authority as agreed within NRW.

Reference	Written Submission Comment	Applicant's response
	Part 2, condition 18 (c) and request that we are consulted, in writing, on the suitability of the above plans prior to commencement of activities. We are pleased to note the commitment to securing the Offshore EMP and the MPCP in both the dML and the standalone ML.	
REP1-056.199	236. On the basis that trenchless techniques to landfall will be used to minimise sediment disturbance, we agree (as noted in RR-011 at para 2.6.3) that, as it stands, we have no concerns from a water quality perspective. However, consideration should be given to the advice at 219 and 227 above with respect to the assessment of the nearshore environment. Should issues transpire, Water Quality should be considered alongside other receptors.	As outlined in the Applicant's responses to REP1-056.182 and REP1-056.190, the Applicant is committed to development and adherence to an Offshore Construction Method Statement (CMS) including a Cable Specification and Installation Plan (CSIP) which will include cable burial where possible and cable protection. The Applicant recognises that the best form of cable protection is achieved through cable burial to the required depth and it is not the Applicant's intention to place cable protection in shallow water but to avoid this if at all possible. Additionally, the Applicant is committed to conduct a detailed Cable Burial Risk Assessment and Burial Assessment Study, which will be included within the CSIP prior to cable laying and which will conf rm the locations requiring cable protection along the cable corridor and outline the measures to be taken to ensure adherence to the commitments. Should cable protection be required measures will be tailored to the specific location to ensure that sediment transport continues unhindered and the wave climate is not notably altered, i.e. adherence to the commitment, ensuring that any cable protection is sufficiently low profile to cause minimal changes to wave, tide and sediment transport. For example, this may include the provision of concrete mattressing typically 0.3 m in height overlaying the cable and completely or partially buried within the trench. These measures will prevent disruption to physical processes and minimise suspended sediments, minimising the potential for impacts to water quality.
REP1-056.200	2.7 Water Framework Directive (WFD) Coastal and Transitional Water Bodies: Offshore works 237. We support the assessment conclusion in APP-088 that the proposed works will not cause deterioration to the water quality of either of the water bodies considered (North Wales coastal waterbody and Clwyd transitional waterbody), nor the individual elements of these water bodies, or impact the objectives of	The Applicant notes NRW's response and welcomes NRW's support.

Reference	Written Submission Comment	Applicant's response
	achieving Good Ecological Potential (GEP) and Good Ecological Status (GES).	
REP1-056.201	238. Paragraph 2.7.2.1 of our Relevant Representation requested clarification on the justification for the screening decision not to include other waterbodies (e.g. Dee (North Wales), Conwy Bay and Anglesey North) in consideration of impacts. The Applicant provided clarification of justification for this within PDA-008 at RR-011.67, which we are satisfied with and therefore have no further comments on the matter.	The Applicant notes NRW's response.
REP1-056.202	239. In response to the Applicant's comments within PDA-008 at RR-011.68, NRW (A) continue to advise that for the purposes of chemical contaminants, the assessment should extend to 12 nm from MHWS for compliance with the WFD Regulations. These regulations state that for all characteristics other than chemical contaminants, assessments can be made to 1nm, however for chemical contaminants assessments shall extend to 12nm.	The Applicant acknowledges NRW's advice that assessment of chemical contaminants for compliance with the WFD Regulations should extend to 12 nm from MHWS. The WFD assessment presented in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088) was undertaken in line with Environment Agency (EA) guidance "Clearing the Waters for All", as advised by NRW(A) in their Scoping Opinion (APP-194). This guidance stipulates that a WFD assessment is undertaken by considering the potential impact of an activity "*up to 1 nautical mile out to sea*" upon the ability for relevant water bodies to achieve or maintain 'Good' status, and that the activity should not jeopardise existing 'Good' status. The Applicant notes that NRW's advice that the assessment should extend to 12 nm from MHWS has not been specified in previous consultation. As the boundaries of WFD water bodies do not extend to 12 nm from MHWS, and based on the EA guidance, the Applicant did not consider that there was a requirement to ascertain the status of WFD water bodies out to this distance. The Applicant will engage with NRW(A) through the Statement of Common Ground process to agree the best approach to address their concern on this matter.
REP1-056.203	240. We do not consider that a satisfactory explanation has been provided to explain the rationale for the limited spatial extent of the Zone of Influence (ZoI) between 1 nm of MHWS and the offshore waters. We remain unsatisfied with the response of the Applicant (RR-011.69, PDA-008) in their establishment of impacts within the ZoI over the route of the transmission cable. We consider that the Applicant has been inconsistent in its approach between legislative regimes in assessing environmental impact and preventing and/or	The Applicant notes NRW's agreement that the conclusions of the assessment presented in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088) would not be altered by the application of a ZoI that aligns with the ZoI assessed for consideration under the Habitats Regulations. In order to undertake a suitable and proportionate assessment of the Mona Offshore Wind Project for compliance with the WFD, a ZoI was determined

Reference	Written Submission Comment	Applicant's response
	mitigating adverse effects on the environment. The ZoI assessed for consideration under the Conservation of Habitats and Species Regulations (Habitats Regulations) is substantially larger than that assessed for consideration under the WFD Regulations. Although this will not alter the conclusions of the assessment, had the Applicant included this it would have made the assessment more robust and would give the ExA confidence that the Applicant is acting diligently in its endeavours to identify and mitigate all potential adverse impacts on the environment. We continue to advise that the justification for the inconsistency is made clear, or that the Applicant is consistent in their approach of consideration of the spatial extent of the impacts of their proposed activities regardless of the legislation they are attempting to comply with.	that was relevant to the specific requirements of this assessment, and which aligned with the recommended EA guidance, 'Clearing the Waters for All'. At all stages of the WFD assessment process, the Applicant has acted diligently to identify and mitigate all potential adverse impacts from the Mona Offshore Wind Project. In all instances of uncertainty pertaining to information about supporting elements, required to undertake the assessment, or where information has been unavailable, a precautionary approach has been taken, and these elements have been scoped in for assessment in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088). The Applicant will engage with NRW(A) through the Statement of Common Ground process to agree the best approach to address their concern on this matter.
REP1-056.204	241. NRW (A) note the typographical error outlined in PDA-008 at RR-011.69 with regard to the ZoIs considered in the WFD compliance assessment. We agree that the conclusions are unaffected by the discrepancy, and we continue to advise that the corrections are carried through to future revisions or re-submissions of the WFD Compliance Assessment.	The Applicant notes NRW's response and has included this error in the Errata Sheet (S_PD_1 F03).
REP1-056.205	242. From review of PDA-008 RR-011.72, NRW (A) note the Applicant's re-assertion that the sediment sample results used to inform the WFD impact assessment are appropriately spatially bound. However, we reiterate our previous advice within RR-011 that additional clarity should be given to highlight that the data used in the WFD compliance assessment were relatively limited in their spatial applicability compared with the entire benthic subtidal and intertidal ecology study area. This request has been made in order to aid clarity and for the benefit of the ExA.	Sediment contamination was taken forward for assessment within Volume 6, Annex 7.2: WFD Coastal Waters Assessment of the PEIR (Mona Offshore Wind Ltd, 2023) on a precautionary basis since results of sediment sampling within the North Wales water body were not available. WFD scoping subsequently undertaken in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088) for the 'sediment contamination' supporting element of the 'water quality' quality element identified that no sediment samples collected within the North Wales water body exceeded the Cefas Action Level 1 threshold for sediment contamination, meaning that further assessment would not be required. Although assessment of the 'sediment contamination' supporting element was not required this was still undertaken on a precautionary basis in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088). The Applicant acknowledges that the spatial extent of sediment sampling results used to inform the WFD assessment does not coincide with the entire benthic subtidal and intertidal ecology study area. Assessment of

Reference	Written Submission Comment	Applicant's response
		sediment contamination results considered sediment samples collected within the North Wales water body (i.e. a subsample of the benthic subtidal and intertidal ecology study area) because the location of these samples was relevant to the spatial extent stipulated by the 'Clearing the Waters for All' guidance.
REP1-056.206	243. Contrary to the assertion made at RR-011.75 that no further assessment is required for biological quality elements and supporting elements due to the proximity to the supporting habitats, we direct the Applicant to Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment [APP-088], Table 1.8 (page 18) which states "impact assessment required" for biology -habitats risks for the North Wales water body. This statement was made by the Applicant both in relation to activity within 500 m of higher sensitivity habitat, and where 1% or more of any lower sensitivity habitat is of consideration for risk of impact. We continue to advise, as noted in our Relevant Representation at 2.7.5.1, that further assessment is required.	The WFD assessment presented in Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088) follows the guidance provided in 'Clearing the Waters for All'. The statement "*impact assessment required*" in the scoping stage of the assessment presented in Section 1.4: Scoping of Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088) follows the terminology used in the scoping template, and refers to the supporting elements of the 'Biology - habitats' quality element that were scoped in for assessment in Table 1.8, namely "*Within 500 m of any higher sensitivity habitat*" and "*1% or more of any lower sensitivity habitat*". These supporting elements have therefore been taken forward for further assessment in section 1.5: Impact Assessment of Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088): • The supporting element "*Within 500 m of any higher sensitivity habitat*" (namely *'Polychaete reef*' (*Sabellaria alveolata*) and *'Mussel beds, including blue and horse mussel*' (specifically blue mussel: horse mussel are not present)) is assessed in paragraphs 1.5.1.3 to 1.5.1.10. The supporting element "*1% or more of any lower sensitivity habitat*" is assessed in paragraphs 1.5.1.1 and 1.5.1.2 of Volume 6, Annex 2.2: Water Framework Directive Coastal Waters Assessment (APP-088).
REP1-056.207	2.8 Biodiversity Benefit 244. NRW (A) welcomes the Applicant's ongoing commitment to engage with us on biodiversity enhancement measures at an appropriate time, as noted in PDA-008. We also welcome the Applicant's positive engagement with the formalisation of the delivery of terrestrial net benefit for biodiversity in Wales as the Welsh Government develops its approach. We will continue to work with the Applicant on developing these proposals as more detail emerges throughout examination and post-consent, and we welcome the work that the Applicant has done on this topic thus far.	This is noted by the Applicant and the Applicant will continue to engage with NRW on this matter.

Reference	Written Submission Comment	Applicant's response
REP1-056.208	245. We welcome the justification provided by the Applicant within PDA-008 at point RR-011.78 with regard to achieving overall net benefit for biodiversity. We also welcome the review of PPW12 as highlighted in PDA-006.	This is noted and welcomed by the Applicant.
REP1-056.209	246. Paragraph 3.2.1.1 in APP-193 states that NRW (A) agreed to the qualitative approach taken by the Applicant during a meeting held in April 2023. Whilst we do not necessarily disagree with this approach, we note that engagement on this topic, from both a terrestrial and marine perspective was limited. We do however acknowledge that no formal advice was requested by the Applicant or provided by NRW (A) during the pre-application phase. Nonetheless, we welcome the Applicant's commitment to this matter, and we will continue to work with the Applicant on this as more detail emerges throughout examination. We welcome the Applicant's response to this matter under RR-011.80 of PDA-008, however we note that this topic is not currently included within the SoCG.	The Applicant will update the SoCG with NRW (REP1-026) to capture agreements on the topic of biodiversity benefit.
REP1-056.210	247. We continue to advise that in developing proposals, mitigation measures should not be considered as methods for biodiversity improvement or enhancement, as they are in place as preventative measures of deterioration of features rather than providing biodiversity benefits from the baseline.	The Applicant has provided a response to this point in PDA-008 (paragraph RR-011.82) and PDA-019. The Applicant will continue to engage with NRW on this matter and hopes to agree a position through the Statement of Common Ground process.
REP1-056.211	248. We welcome the Applicant's commitment to further considering the inclusion of the Marine Area Statements in developing the Biodiversity and Green Infrastructure Statement.	This is noted and welcomed by the Applicant.
REP1-056.212	2.9 Decommissioning - Offshore 249. We acknowledge the commitment to produce a Decommissioning Programme under section 105 of the Energy Act 2004 to be approved by the Secretary of State for the Department of Energy Security and Net Zero (DESNZ). This has been noted by the Applicant within PDA-008.	This is noted and welcomed by the Applicant.
REP1-056.213	250. We note from PDA-008 section RR-011.85, and welcome that the Decommissioning Plan will be shared with NRW (A) at the	Requirement 20 of the draft development consent order (C1 F04) (see Schedule 2) requires a decommissioning plan to be submitted to the

Reference	Written Submission Comment	Applicant's response
	appropriate time. For clarity, NRW (A) were not advising in our Relevant Representation (RR-011) that the plan should be submitted at this point in time, but pointing out that when it is produced for consultation, it should retain all decommissioning options (maintain, full removal, and partial removal) so that all options can be fully assessed and refined closer to the time of decommissioning itself. As expressed in RR-011, NRW (A) reserves its position until a draft plan is submitted at which point we will provide further advice.	Secretary of State prior to commencement of the offshore works. The Applicant in producing the decommissioning plan will take account of best practice and new technologies available at the time of submission including the various decommissioning options as well as the relevant legislation and guidance. The provisions of the Energy Act 2004 will otherwise govern the consideration and approval of the decommissioning plan and subsequent decommissioning process. For instance, Section 105(8) of the Energy Act 2004 sets out what is to be included in the written decommissioning programme. Of particular relevance: the measures which will be undertaken to decommission the offshore wind assets and the times and periods within which those measures will be undertaken. Section 109 of the Energy Act 2004 includes an obligation to decommission in accordance with the written decommissioning programme and creates a criminal offence if that obligation is not satisfied. As the process is governed by the Energy Act 2004 any consultation undertaken prior to submission of the decommissioning programme for approval will be carried out in accordance with that Act.
REP1-056.214	251. We welcome the clarity provided by the Applicant with respect to the Applicant's intention for decommissioning activities to be secured through separate standalone Marine Licence at the relevant time (PDA-008, RR-011.86).	This is noted and welcomed by the Applicant.
REP1-056.215	2.10 Mitigation and Monitoring Schedule; Marine Licence Principles and the Development Consent Order 252. Following review of PDA-008 RR-011.87, we wish to reiterate our point made in RR-011 that there remain inconsistencies between the Mitigation and Monitoring Schedule [APP-196], Marine Licence Principles document [PDA-005] and draft Deemed Marine Licence [AS-010] that require review. We advise that the Applicant should conduct a thorough check and ensure that all requirements / conditions are accurately captured across all relevant documentation.	An updated Mitigation and Monitoring Schedule (J10 F02) and Marine Licence Principles Document (J9 F03) have been provided at Deadline 2 with updates made to ensure consistency across the documents, including the draft development consent order (C1 F04).
REP1-056.216	253. For example, APP-196 states that condition 18 (1)(d) within the draft dML to produce an Offshore CMS should include a commitment to cable burial where possible. We note that this	It is not necessary for this commitment to be included within either of these documents. The offshore construction method statement will include that commitment and the commitment to developing an offshore construction method statement prior to offshore works commencing is secured through

Reference	Written Submission Comment	Applicant's response
	commitment has not been transposed to the dML within the draft DCO, or the Marine Licence Principles document.	Condition 18(1)(d). A record of the Applicant's commitment to this is included within the Mitigation and Monitoring Schedule (J10 F02) which has been added to Schedule 15 of the Draft DCO (Document Reference C1 F04) as a certified document.
REP1-056.217	254. Such discrepancies may result in confusion and uncertainty as to the extent of measures that may be secured in respective consents. We advise that the Applicant undertakes a full review of these documents so as to provide assurance that measures are appropriately captured. It is important that all relevant documents are consistent and contain accurate reference to all proposed mitigation, monitoring and plans as described in the application documents and agreed with interested parties. Please also see comments provided by NRW MLT at paragraph 340 below.	Please see the Applicant's response in row REP1-056.215.
REP1-056.218	2.10.1 Conditions and requirements within the DCO 255. We note from review of the draft DCO that the requirements/conditions under Schedule 14 dML: Part 2 18-21, 24-28 refer to the need for authorisation to be approved in writing by the Licensing Authority in consultation with the relevant identified bodies. We note that at present the only ANCB that the dML references is JNCC and NRW (A) are not included in any of the requirements/conditions. The documents outlined in these sections of the dML will all require consultation with NRW (A), in writing, prior to approval by the regulator. This includes (but may not be limited to) all pre-construction plans and documentation, the UWSMS, UXO clearance, pre-construction monitoring and surveys, construction monitoring, post-construction monitoring, reporting of scour and cable protection. We advise that the Applicant undertakes a thorough review of all conditions and amended where necessary. Please also see comments made by NRW MLT with respect to pre-commencement plans at Section 4.5.	The JNCC is the statutory nature conservation body for the purposes of the deemed marine licence and is, therefore, the body listed as a consultee for the purposes of the Conditions in Schedule 14 of the draft development consent order (C1 F04). NRW is not restricted to only consulting with listed bodies, nor is it restricted from the licencing team consulting internally with its advisory team. No further changes are proposed to the drafting.
REP1-056.219	256. We also note the use of 'MLW' and 'MHW' within some of the conditions as opposed to MLWS and MHWS. However, application documents and SoCGs use MLWS and MHWS. We request clarification from the Applicant on the interchangeability of this terminology and the implications for the assessments and relevant	The terms MLWS and MHWS have been removed from Schedule 14 of the draft development consent order (Document Reference C1 F04) as they are no longer used.

Reference	Written Submission Comment	Applicant's response
	licences (dML / ML). Please also see comments made by NRW MLT in row 2 in Annex D.	
REP1-056.220	3 ONSHORE – DETAILED COMMENTS 3.1 Designated Landscapes 257. NRW's (A) Written Representations on seascape, landscape, and visual matters are set out below. These relate to the development's potential impacts on the character and visual amenity of the Isle of Anglesey (IoA) National Landscape (NL), Eryri National Park (ENP), and the Clwydian Range and Dee Valley (CRDV) NL, and the statutory purpose of these designations to conserve and enhance their natural beauty.	The Applicant notes NRW's response.
REP1-056.221	258. For the purposes of this representation, the aforementioned designations are referred to collectively as Statutory Designated Landscapes (SDLs) and ES Volume 2 Chapter 8: Seascape and Visual Resources [APP-060] and ES Volume 3, Chapter 6: Landscape and Visual Resources [APP-069], and the appendices which support these chapters, are referred to collectively as the Seascape, Landscape, and Visual Impact Assessment (SLVIA).	The Applicant notes NRW's response.
REP1-056.222	3.1.1 Effects of Proposed Development 259. Since NRW (A) commented on the PEIR6, the Maximum Design Scenario (MDS) for the proposed wind turbines has changed. For MDS Scenario 1 the maximum number of turbines has reduced from 107 to 96 but the maximum blade tip height is unchanged at 293m above Lowest Astronomical Tide (LAT). For MDS Scenario 2 the maximum blade tip height has increased from 324m to 364m above LAT, but the maximum number of turbines is unchanged at 68 turbines. (Table 3.5 ES Document Reference: F1.3) [APP-050].	The Applicant notes NRW's response.
REP1-056.223	260. The changes above do not address concerns raised in pre-application advice provided by NRW (A) to the Applicant regarding the impacts of the proposed turbines on the IoA NL and potential cumulative impacts on both the IoA NL and ENP. Instead of reducing the maximum blade tip height of the turbines, the Applicant has increased it. We advise that without a reduction in the height of the turbines and/or a reduction in the array area (i.e.	The Applicant provided a response to this comment in PDA-011 (see section effects on the character and special qualities of the Isle of Anglesey National Landscape (paragraphs 1.2.2.3 to 1.2.11), effects on the character and special qualities of the Eryri National Park (paragraphs 1.2.2.12 to 1.2.2.17) and effects on the settings of nationally designated landscapes paragraphs 1.2.2.24 to 1.2.2.27).

Reference	Written Submission Comment	Applicant's response
	away from the coast) it is likely the proposed turbines will cause: Significant adverse effects on the views and visual amenity of people within the IoA NL and ENP. Significant adverse effects on sensory and perceptual characteristics and special qualities of the IoA NL; Significant adverse cumulative effects on sensory and perceptual characteristics and special qualities of the IoA NL and ENP; and Effects on the IoA NL, ENP, and CRDV NL that are not significant, but nevertheless adverse. All are designated for their natural beauty, and the importance nationally of this being conserved and enhanced.	OESEA4 (DBEIS, 2022; section 5.8.1.1): "*Planning policies, for instance, the National Planning Policy Framework and the Energy National Policy Statements (e.g. NPS EN-1 (DESNZ, 2024b) and NPS EN-3 (DESNZ, 2024a)), exact the highest degree of protection to designated sites (i.e. statutory designated areas such as Ares of Outstanding Natural Beauty (AONBs)), but do not propose that development should be precluded within them where project design would not conflict with the interests and features for which the sites are designated. As with previous NPSs, where an offshore wind farm is within the sight of the coast consent should not be refused solely on the grounds of an adverse effect on seascape and amenity unless:* • *it considers that an alternative layout within the identified site could be reasonably proposed which would minimise any harm, taking into account other constraints that the applicant has faced such as ecological effects, while maintaining safety or economic viability of the application* *taking account of the sensitivity of the receptor(s) and impacts on the statutory purposes of designated landscapes as set out in Section 5.10 of EN-1, the harmful effects are considered to outweigh the benefits of the proposed scheme."*
REP1-056.224	261. The proposed wind turbines individually and cumulatively with e.g., the consented Awel-y-Môr development, will result in visual changes to the settings of the IoA NL and the ENP. These changes will harm characteristics and qualities of these landscapes - particularly those relating to perceptual and scenic aspects. We advise the SDLs exist for the purpose of conserving and enhancing their natural beauty. In the case of both the IoA NL and the ENP, the proposals will harm aspects of these landscapes which contribute to their natural beauty.	The Applicant provided a response to this comment in PDA-011 (see section 1.2.2). The Applicant's position is that the Mona Array Area would not affect the settings of the IoA NL and the Eryri NP, both individually and cumulatively.
REP1-056.225	262. Effects on the views and visual amenity of visual receptors (people) at locations within both the IoA NL and ENP would be significant and adverse, both as a result of the proposed development individually and cumulatively with the consented Awel-y-Môr development. This will include harm to views at locations which attract visitors seeking to experience the natural beauty and special qualities of these landscapes. Particularly within the IoA NL which is predominantly a coastal designation.	The Applicant provided a response to this comment in PDA-011 (see section 1.2.3). The Applicant notes that the IoA NL is a coastal designation, however due to the distance of the Mona Array Area from the designated landscape (29 km at its closest point) and being located in 'open sea' it would have almost no relationship to the coastal landscape and coastal landscape features. Mona is so distant from the North Wales Coast that it would have no relationship with the coastline and its features such as headlands and

Reference	Written Submission Comment	Applicant's response
		Islands. This contrasts with Awel-y-Môr which is much more closely aligned with the coast and its features including headlands and Islands. The Applicant notes NRW comment and intends to produce additional cumulative wirelines at a number of viewpoint locations. These will show both the Mona Array Area and the Awel-y-Môr array area. These will be provided at Deadline 3.
REP1-056.226	263. People using the Isle of Anglesey Coast Path, Wales Coast Path, and Cambrian Way would experience both combined and sequential cumulative impacts as a result of the proposal and wind turbines within the consented Awel-y-Môr development. At locations such as Penmon Point, the cumulative effect would be greater than the effect of the Mona Array Area in isolation, and it is likely to be significant. We advise that as a result of both schemes in combination, people will have to travel ever further west along the north coast of Wales – and in effect to the western side of Anglesey - to be afforded coastal views unaffected by wind turbine development.	The Applicant provided a response to this comment in PDA-011 (see section 1.2.3). No significant visual effects from the development of the Mona Array Area would be experienced by people using either the Wales Coast Path (WCP), or Offa's Dyke Path National Trail. Almost the entire length of the WCP falls within the ZTV along the eastern coast of the IoA and the northern coast of Wales. The WCP also falls within the ZTV of the consented Awel-y-Môr development. As the consented Awel-y-Môr development is almost three times closer to the coast than the Mona Array Area, inevitably the Awel-y-Môr will form the focus in views from the WCP. The consented Awel-y-Môr will double the viewing angle occupied by turbines in views at a distance of 11 km to 14 km from the north coast between Ormes/ Llandudno Bay and Dee Estuary and will dominate the views from the WCP due to its close proximity to the coastal features such as small islands and headlands. The Mona Array Area would be a subsidiary and not clearly perceivable distant feature in comparison with the dominating Awel-y-Môr development. In order to have unaffected coastal views from the Wales Coast Path people would have to travel to a distance of 30 km from the consented Awel-y-Môr project. Whereas in relation to the Mona Array Area, people are already at a distance where visibility of the type of the development proposed is strongly affected by weather conditions. Figures (Figure 1.1 to 1.3 in PDA-011) have been produced for comparative visibility ranges of Mona and Awel-y-Môr from the Wales Coast Path. This illustrates that the Mona Array will be seen at its closest to the coast of the IoA, within a visibility range of up to 30 km at Point Lynas. Beyond Point Lynas the Mona Array Area falls beyond a 30 km visibility range.
REP1-056.227	264. People walking the Offa's Dyke Path National Trail where it crosses the CRDV NL are expected to experience combined and	NRW's comments are welcomed by the Applicant.

Reference	Written Submission Comment	Applicant's response
	sequential visibility of the Tier 1 onshore and offshore projects (including Awel-y-Môr substation) and experience potentially significant adverse visual effects. However, mitigation measures are expected to reduce the impact on receptors within the CRDV NL. These measures – which we welcome – include proposals for new woodland planting around the proposed substation, as illustrated on the Illustrative Landscape and Ecology Strategy Plan within the Outline Landscape and Ecology Plan (LEMP) [APP-208] together with the intention for substation buildings to be finished in recessive colours as set out in the Design Principles [APP-189].	The Applicant is pleased that the proposed woodland planting around the proposed substation, as illustrated on the Illustrative Landscape and Ecology Strategy Plan within the Outline Landscape and Ecology Plan (LEMP) (APP-208) together with the intention for substation buildings to be finished in recessive colours as set out in the Design Principles (APP-189) has been welcomed by NRW.
REP1-056.228	265. We disagree with conclusions in the Seascape Landscape and Visual Impact Assessment (SLVIA) regarding the effects of the proposed turbines on the IoA NL, ENP, and visual receptors within the SLDs. We advise the SLVIA has underreported and underestimated effects on SLDs. We advise conclusions regarding the effects on SLDs reported in the SLVIA are undermined by a number of issues. These include the omission of relevant receptors from the assessment, flaws within the SLVIA methodology, and flawed judgements. We advise that because the SLVIA has underestimated the effects of the proposed wind turbines, no specific mitigation measures have been considered.	The Applicant provided a response to this comment in PDA-012 (section 1.2.3). The Mona Array Area is located within a low visibility area of the sea from principal landscape designations (OESEA4 (DTI, 2005), Figure 5.48 and 5.49). The Mona Array Area follows the OESAE4 (DTI, 2005; page 406) siting principles, which help to reduce the impact of a given development: • try to locate in low sensitivity or high capacity seascapes • place development as far offshore as possible • try to locate developments away from coastal landscape designations • try to use development siting to minimise visibility (e.g. behind headlands) • consider siting relationships with other offshore infrastructure (cumulative effects). The shape and layout of the Mona Array Area would determine that the extent of the Mona Array Area boundary facing the coast would occupy only a limited field of view. In relation to coastal views the eye is always drawn to the distinctive coastal landform. It is considered that the open sea, with the Mona Array Area located at a distance of 29 km from the coast, can absorb the Mona Array development.
REP1-056.229	266. We are concerned that the SLVIA local landscape and seascape character areas have been excluded from the SLVIA. Whilst studies such as the Anglesey Landscape Strategy, 2011 and Anglesey Seascape Character Assessment, 2013, are referenced in the SLVIA, they are not receptors and it is not clear how – if at all	The Applicant provided a response to this comment in PDA-012 (section 1.2.3). Further consideration of NRW's comment is included below in the Applicant's response to REP1-056.366.

Reference	Written Submission Comment	Applicant's response
	- the review of these documents has informed an understanding of the character of the SDLs, their special qualities, and the impacts on these.	
REP1-056.230	267. We advise there are methodological and presentational issues with the visualisations and figures intended to support the SLVIA. Issues include wirelines not presented in accordance with best practice (e.g. turbines blades pointing up); photography taken in unsuitable conditions; heavily pixilated baseline photography; and information being illegible due to the presentation of figures/maps – often at a high scale - as small insets within the ES report. It is also noted that when using the visualisations on site, the landscape appears smaller in the photomontages than in reality. This means that when viewing the photomontages on site or at 100% on screen, the turbines will also appear smaller than they would in reality. This issue is compounded by the separate issue of the prominence of the turbines being downplayed at VPs such as VP 4 and VP 7 where the turbines have been depicted more faintly than they would appear in reality. Including also at e.g., VP 55 where turbines have been rendered faintly presumably in response to poor visibility conditions - when baseline photography should not have been taken. We also note errors such as the onshore photomontages for VP 11 (APP-158), which appear to show the substation would be more noticeable in summer at Year 15 with mitigation planting established and in leaf (Figure 22), and less noticeable in winter at Year 1 (Figure 21).	The Applicant provided a response to this comment in PDA-012 (section 1.2.3). The methodology for the photomontages is set out in APP-104 and APP-156. As explained in that document and in accordance with best practice, the assessment was not undertaken solely on the photomontages but used the wirelines as a guide/worst case combined with extensive observations from site visits. Paper copies of the visualisations, at the correct scale, have been provided to the Ex.A and to NRW. As outlined at the ISH2 (REP1-009), in distant views the onshore substation was not visible using the grey colour applied for the closer onshore representative viewpoints. The colours used in these views were brighter to exaggerate/over-emphasise the substation, so that it was visible in the visualisation. The photomontage for representative viewpoint 11 (Moel y Parc, Clwydian Range and Dee Valley National Landscape) does not illustrate the mitigation measures, including the proposed planting which would provide significant visual screening over time. These photomontages should be interpreted having regard to the limitations associated with photomontage preparation documented in Appendix B in Volume 7, Annex 6.4: Landscape, seascape and visual impact assessment methodology (APP-069). For the Mona SLVIA a large number of viewpoints have been selected, photographed and visualisations produced. It should be noted that because the Mona Array Area will be located at a considerable distance from the coast there is no appropriate and reliable visualisation technique available to illustrate accurately the proposed development alongside the existing and consented cumulative context. NatureScot (previously Scottish Natural Heritage) Guidance in Naturescot Visual Representation of Wind Farms (2017) states that photomontages production will usually be of most value for views within 20 km of a wind farm (NatureScot, 2017, page 33, paragraph 160). Stating that at distances

Reference	Written Submission Comment	Applicant's response
		greater than this it can be difficult to represent the turbines well on a photomontage. There is also no visualisation guidance available for offshore developments at considerable distance from the coast, where variations in light and atmospheric conditions influence the visibility of the turbines within the images. The visual simulation/ photomontage technique used provides the most accurate representation of location, scale and the general appearance of the proposed offshore development currently available. The photomontages show all of the wind turbines at the same colour intensity which does not take account of the more realistic situation where turbines that are located further away from the viewer will appear fainter than wind turbines located closer to the viewer. In reality, turbines at different distances appear in varying degrees of sharpness as the atmospheric conditions affect views over long distance. Due to the lack of distinction between the foreground or background turbines, the whole development appears more dense and potentially confusing due to the lack of perception, which provides a realistic impression of depth, or of the distance. Wireline views are considered a good alternative to locate turbines in distant views, but, wirelines also have considerable limitations as the foreground is heavily cropped, without any reference features which would provide a clue as to what the distance could be or what the height of the turbines are. Our ability to correctly scale the size of an object is dependent on our perception of distance in the real world. Only perspective can create a realistic impression of depth, or of distance. NatureScot (2017) admits that wirelines may be relatively unhelpful in flat landscapes, apart from during the design stage, or in conjunction with other, photographic, visualisations (NatureScot, 2017, page 3, paragraph 7). The sea horizon represents the ultimate flat plane on the wireline view, where the closest and the furthest turbines appear on one line, resulting in a loss of perspective, as there is no distinction between foreground or background turbines. Of particular importance in understanding this lack of depth of the wireline image in the case of offshore wind farms is where the distance in between turbines is around several kilometres and where the distance between the closest and furthest turbine to a viewpoint could differ by more than 20 km. In addition, the wireline view shows a clear outline of the object despite its distance from the viewer. In reality, turbines at different distances

Reference	Written Submission Comment	Applicant's response
		would appear in varying degrees of sharpness. This effect further reduces the perception of perspective. Therefore, the offshore wind farm appears dense and confusing in wireline views due to the lack of depth / perspective.
REP1-056.231	268. We advise that despite Awel-y-Môr having been approved, this scheme is only shown in the wireframes from 5 viewpoints within SDLs. We advise all of the wireframes should include this scheme / a separate cumulative wireframe should be provided for all viewpoints as is best and common practice. This omission means at other viewpoints, where the nature of the view and the cumulative impact would be different, no visualisation is provided. We also advise cumulative visualisations showing the proposed substation and other Tier 1 developments (including the Awel-y-Môr substation) would be beneficial.	The Applicant provided a response to this comment in S_PD_3.4. Cumulative wirelines have been produced for 9 viewpoints, which show Awel-y-Môr. These viewpoints illustrate the cumulative situation with the consented Awel-y-Môr from different areas, directions, elevations and from different distances, and are considered sufficient to inform the assessment. The Applicant maintains that sufficient locations, including diverse geographical locations and elevations have been included in the cumulative wirelines to allow for a thorough assessment of the cumulative effects. With regards to the Mona Onshore Substation, the Applicant notes NRW's comment and is currently reviewing the available information. The Applicant intends to produce cumulative visuals of the Mona and Awel y Môr onshore substations and the National Grid Extension when sufficient information is available.
REP1-056.232	269. Overarching National Policy Statement for Energy (NPS EN-1) sets out a requirement for projects to be designed carefully, taking account of the potential impact on the seascape and landscape. The aim is to minimise harm to the seascape and landscape, providing reasonable mitigation where possible and appropriate. We do not consider that sufficient evidence has been provided to demonstrate that seascape, landscape, and visual impacts have been minimised in this case.	The Applicant provided a response to this comment in PDA-011 (see section 1.4). See the Applicant's response to REP1-056.228. Along with the distance, the shape of the Mona Array Area determines that only limited areas of the array would be visible from the coast and would not be seen in association with coastal features. Most of the proposed Mona Array Area extends beyond the limit of negligible visual effects, in views from both the northern coast and eastern coast of the Isle of Anglesey. Also the proposed Mona Array Area would not appear in framed views or across inner firths, where developments could take up more of the horizon.
REP1-056.233	270. We advise the proposal would not accord with Policy SOC06 – Designated Landscapes - of the Welsh National Marine Plan 2019 (WNMP) because it does not avoid adverse impacts on designated landscapes; has not satisfactorily minimised impacts which cannot be avoided; and has not satisfactorily mitigated impacts which have neither been avoided nor minimised. Therefore, we advise that mitigation measures should be explored in the first instance. Enhancement measures should not be	The Applicant provided a response to this comment in PDA-011 (see section 1.4.2). The Applicant notes the wording of Policy SOC_06: Designated landscapes of the Welsh National Marine Plan (2019) recognises that a staged approach should be taken to proposals such that Applicants should seek to avoid impacts in the first instance. Where that is not possible, impacts should be minimised and then mitigated, if required. The Applicant has followed this approach as demonstrated through its process of site selection

Reference	Written Submission Comment	Applicant's response
	proposed unless and until mitigation measures have been fully exhausted.	as set out in Volume 1, Chapter 4: Site Selection and Consideration of Alternatives (APP-051) and its approach to design as set out in Design Principles (APP-189). The Mona Array Area adheres to following good design principles which are set out in the Stage 2 report of Seascape and visual sensitivity to offshore wind farms in Wales (White Consultants, 2019) which replicates the Guidance on the Assessment of the Impact of Offshore Wind Farms: Seascape and Visual Impact Report (DTI, 2005). These have sought to avoid or minimise adverse effects as stated in Policy SOC_06: Designated landscapes of the (WNMP, 2019). These are: • located far away from the coastline/ landscape designations • located in lower sensitivity seascapes • avoids stacking effect • set back from the existing/ consented offshore wind farms • avoids developments being visible in juxtaposition with sensitive views to headlands • avoids providing scale reference in views with small islands or coastal landform/ features avoids filling framed views in between headlands.
REP1-056.234	271. Opportunities to enhance designated landscapes are encouraged by the WNMP but no proposals for enhancement have been included by the Applicant in the draft DCO. We consider enhancements represent compensation and/or offsetting and not mitigation for adverse effects, as any enhancements would not be directly related to the impacts. Notwithstanding this, if DCO consent is to be granted, we consider that a proportionate enhancement scheme for the IoA NL and ENP should be provided to compensate for the adverse effects of the Mona Array on these nationally important landscapes. Our detailed comments on the seascape, landscape and visual effects of the project are provided in Annex B	The effects individually attributable to the Mona Array Area would not affect the special qualities of designated landscapes or visual amenity (as outlined in the Applicant's response to REP1-056.344. The effects attributable to the Mona Array Area outside of the SDLs boundaries are indirect and only perceptual. These effects have been reduced by locating the Mona Array far away from the coast. The Applicant, therefore, maintains that no offsetting or enhancement measures are required.
REP1-056.235	3.2 Water Framework Directive (WFD) Compliance Assessment: Onshore works 3.2.1 Marine	The Applicant notes and welcomes the response.

Reference	Written Submission Comment	Applicant's response
	272. We note that the Applicant notes and welcomes our comments put forward in RR-011 3.2.1.1, 3.2.1.2 and 3.2.1.3 regarding WFD compliance assessment conclusions within PDA-088 RR-011.105 to RR-011.107, and therefore have no further comments to make.	
REP1-056.236	273. Following review of the Applicant's response in PDA-008 at RR-011.108, NRW (A) reiterate the advice to include Rhyl East and Abergele (Pensarn) bathing waters sites for assessment of impact. Further comments at section 3.2.4 below.	See response to REP1-056.240 below.
REP1-056.237	3.2.2 Water Quality 274. NRW (A) agrees with the WFD compliance assessment conclusion [APP-120] that there is no pathogen source from the onshore works and so no potential to impact the Clwyd transitional waterbody and associated bathing waters sites.	The Applicant notes and welcomes the response.
REP1-056.238	275. We agree with the WFD compliance assessment conclusion that the proposed onshore works are unlikely to create or present significant sources of nutrients that would negatively impact the moderate phytoplankton status of the North Wales coastal waterbody or the good status of the Clwyd Transitional waterbody	The Applicant notes and welcomes the response.
REP1-056.239	3.2.3 Fish 276. We agree with the WFD compliance assessment conclusion [APP-120] that the proposed onshore works are unlikely to pose a potential risk to the fish quality element status of the Clwyd transitional waterbody and therefore advise that detailed assessment is not necessary.	The Applicant notes and welcomes the response.
REP1-056.240	3.2.4 Protected Areas 277. We support the Applicant's approach to consideration of bathing waters protected areas (Environment Statement – Water Framework Directive surface water and groundwater assessment, Vol 7 Annex 2.4 para 1.9.4.6 pg. 70 [APP-120]). We advise that the Applicant takes note of the susceptibility of the Pensarn, the Kinmel Bay, the Rhyl and Rhyl East bathing waters sites to failure during heavy rainfall events when sewage, agricultural and sanitary pollutants may be washed into the sea. We note that the Applicant's response to our Relevant Representation [PDA-008]	The Applicant has considered the request by NRW to extend the study area for bathing water and accepts the requirement to include Kinmel Bay, Rhyl and Ryhl East Bathing Waters in the assessment. The potential impact on these additional bathing waters is outlined below. The Kinmel Bay, Rhyl and Ryhl East 2024 Bathing Water Profiles indicate that the surface water catchment area for these three protected areas is similar. The natural drainage (hydrological) catchment immediately surrounding the Ryhl and Rhyl East bathing waters is dominated by the

Reference	Written Submission Comment	Applicant's response
	still refers mostly to Abergele (Pensarn) and Marine Lake in WFD CA "The assessment includes the bathing water quality profiles at Abergele (Pensarn) and the Marine Lake at Rhyl." We reiterate that Kinmel Bay, the Rhyl and Rhyl East bathing waters should be included. The proposed activity presents a high risk of causing deterioration to the status of these protected areas. The more turbid the water (e.g. due to wind, rain or a sediment/solids source) the less ultra violet light will reach the bacteria in the water. As a result, bacterial survival is higher, and this can result in bacteria surviving longer in the water body and then on to the designated European bathing beach. Therefore, we advise an extension of the spatial area to be considered for impact beyond the usually acceptable 2 km.	large town of Rhyl. Rhyl is located next to the mouth of the River Clwyd, which drains the Vale of Clwyd. Within the Vale, farming is of major economic importance and dominates the land. The natural drainage (hydrological) catchment surrounding the Kinmel Bay bathing water is primarily man-made and is pumped away from the Kinmel Bay area to the Clwyd Estuary. For all three bathing waters the bathing water profiles note that short term pollution is caused when heavy rainfall washes faecal material into the sea from livestock, sewage and urban drainage via rivers and streams. The onshore elements of the Mona Offshore Wind Project traverse the surface water catchments for these bathing waters however, as was highlighted for the Abergale (Pensarn) and Marine Lake at Ryhl bathing waters, pathogens are unlikely to be a source of contamination as the working area will be fenced off in advance of construction and the land application of slurry and manures in the working area will not occur in advance of construction. The location of septic tanks and their percolation area is not considered as a significant risk to these bathing waters. Any potential for septic tanks and their percolation area to be located within the construction area will be noted in pre-construction site investigation surveys and protective measures taken to ensure that they are not impacted. The export of sediment laden water from the onshore elements of the Mona Offshore Wind Project that could potentially increase the turbidity in the downstream coastal waters within which these bathing waters are located will be adequately managed through soil management measures and pollution prevention measures outlined in the Outline Code of Construction Practice (CoCP) (J26 F02). This will ensure that turbidity levels will not be elevated at these bathing waters due to the onshore elements of the Mona Offshore Wind Project and therefore will not reduce ultraviolet light penetration that could result in prolonged survival rates for bacteria. The onshore elements of the Mona Offshore Wind Project will therefore not have a significant effect on the protected area objectives of the Abergale (Pensarn), Marine Lake at Ryhl, Kinmel Bay, Rhyl and Ryhl East Bathing Waters.

Reference	Written Submission Comment	Applicant's response
REP1-056.241	278. We welcome the commitment in the Outline Code of Construction Practice (CoCP) [APP-212] to pre-construction site investigation surveys and protective measures to reduce the risk of exacerbating this.	The Applicant notes and welcomes the response.
REP1-056.242	3.2.5 Biology, INNS 279. We support the conclusions of the WFD compliance assessment [APP-120] that there will be no potential risk to the biological habitats, biological species or INNS receptors from the onshore portion of the proposed works to the WFD transitional and coastal waterbodies considered.	The Applicant notes and welcomes the response.
REP1-056.243	3.2.6 Mitigation measures assessment 280. In section 3.2.5 of our Relevant Representation, we advised that the mitigation measures assessment element for North Wales coastal water body (table 1.15 [APP-120]) should be moderate status, rather than the good status reported in 2021 classification. This is because the mitigation measures should be "not in place - not yet identified" instead of "Not applicable - not required in this water body" (Water Watch Wales 2021 Cycle 3 Classification Data - Erratum tab). We note and welcome the update as noted in mitigation measures assessment element for the North Wales coastal water body is reported as 'moderate status' in the Mona Errata Document [PDA-006].	The Applicant notes and welcomes the response.
REP1-056.244	3.2.7 In combination effects and cumulative effects 281. We note the submission of Annex 3.5 of the Applicant's Responses to our Relevant Representations [PDA-013]. We welcome the clarification provided for WFD.	The Applicant notes and welcomes the response.
REP1-056.245	3.2.8 Fluvial geomorphology elements of the WFD 3.2.8.1 General Comments 282. We note the Applicant's Responses to our Relevant Representations [PDA-008] and largely reiterate our points below as our position remains valid. Elements of the proposed infrastructure may yet need to be significantly repositioned to alternative (more acceptable) locations within the catchment following receipt of adequate geomorphological field survey.	The Applicant intends to collate a baseline of existing geomorphological conditions to be presented with a photographic record for the benefit of the Local Authorities and NRW. This will be provided to the Examination at an appropriate time. The geomorphological field surveys will inform the detailed design of the watercourse crossings which will be included in the final Onshore Construction Method Statement which will form part of the Code of

Reference	Written Submission Comment	Applicant's response
	Further information (as previously stated) should be provided in order to agree these locations in principle.	Construction Practice (CoCP). The CoCP is secured by Requirement 9 of the draft DCO.
REP1-056.246	283. With the exception of being mentioned in the WFD assessment [APP-120] and partial related reference to impacts on habitats in the Onshore Ecology chapter [APP-066] section, the ES fails to specifically address fluvial geomorphology (the physical form and natural processes of rivers). Unlike other similar subjects (e.g. hydrology, flood risk, ecology, fisheries etc) there is no baseline fluvial geomorphology data (e.g. River Habitat Survey, MoRPh, Fluvial Audit), no impacts identified, no consideration of sensitivity of receptors, no significance of effect or cumulative impact of any of the proposed works with regard to fluvial geomorphology (e.g. open cut or trenchless crossings of watercourses, haul road bridges etc.). As stated in our previous response to the PEIR dated (1 June 2023 AOS-21167-0026) "More details of the geomorphological impacts associated with the proposals should be provided and suitable expertise sought." This position remains valid.	Please see response to REP1-056.245. The two watercourses that have the potential to be crossed using trenched construction methodologies have been assessed as low sensitivity, heavily modified and incapable of supporting fish or macroinvertebrates based on the information provided in Volume 7, Annex 3.6: Aquatic invertebrate survey technical report (APP-126) and Volume 7, Annex 3.15: Fish and eel survey technical report (APP-138) of the Environmental Statement). Therefore, notwithstanding the Applicant's commitment to providing the collation of existing geomorphological information, the applicant is confident that the assessment of effects undertaken within Volume 3, Chapter 2: Hydrology and flood risk (APP-065) and Volume 7, Annex 2.4: Water Framework Directive surface water and groundwater assessment [APP-120] will remain unchanged as a result of the collation of existing geomorphological information given the low sensitivity of the ordinary watercourses traversed by the onshore elements of the Mona Offshore Wind Project.
REP1-056.247	3.2.8.1.1 Environmental Statement Volume 5, Annex 5.3: Onshore Crossing Schedule [APP-083] 284. From the onshore crossing schedule there appears to be 9 watercourse crossings proposed. Seven of these crossings are proposed as trenchless (NRW (A)'s preferred method of crossing, dependant on launch and receiving pit locations and depth below the watercourse) and two marked as to be crossed via trenching or trenchless (S3N/S-WX-1 and S9-WX-1). Additional detail should be provided for each crossing location (and haul road bridges) but greater depth of assessment will likely be required for the crossings proposed using trenched techniques.	Please see response to REP1-056.245.
REP1-056.248	3.2.8.1.2 Environmental Statement Volume 7, Annex 2.4: Water Framework Directive surface water and groundwater assessment [APP-120] 285. "A note of the condition of each channel has been made" –	Please see response to REP1-056.245. Environmental Statement Volume 7, Annex 2.4: Water Framework Directive surface water and groundwater assessment (APP-120) refers to the baseline information on the habitats and hydromorphology along the

Reference	Written Submission Comment	Applicant's response
	however, no details of how this was assessed, or the record of the condition has been provided.	watercourses that were made during site surveys undertaken by the onshore ecology team. These are recorded in Volume 7, Annex 3.2: Extended Phase 1 habitat survey technical report (APP-122), Volume 7, Annex 3.15: Fish and eel survey technical report (APP-138), and Volume 7, Annex 2.4: Water Framework surface water and ground water assessment (APP-120).
REP1-056.249	286. Open cut trenching techniques can cause long term or irreparable impacts, not just short to medium term impacts stated in Table 1.13.	Please see response to REP1-056.245. The design of the watercourse crossings will ensure the depth of cover to the cable ducts is sufficient to avoid exposure of the cable over the long term. The watercourses traversed are of low sensitivity and are indicative of depositing rather than eroding channels where the risk of exposure in the long term is low.
REP1-056.250	287. No consideration is given to the long-term impacts on the rivers physical form and natural sediment processes given that the proposals fail to detail decommissioning of the scheme at the end of its life (Table 1.13), leaving equipment in-situ in perpetuity potentially within zones of influence of rivers. Rivers are naturally mobile features of the landscape and as such the risk of erosion, scouring or re-exposure of cables etc is likely over the coming generations. Failure to decommission all elements of the proposals within the rivers zone of influence will result in exposure of any abandoned buried infrastructure over time as the rivers meander across their floodplain and valley floor. This would likely result in deterioration of the environment in terms of the Water Framework Directive at that time, require others to pay for its removal and restoration, and as such presently would likely fail to comply with the Future Generations Act.	
REP1-056.251	288. Notwithstanding the above, we acknowledge that the Applicant will still need to prepare the information advised above to inform the final CoCP which is secured by Requirement 9 of the draft DCO. We note from the Applicant's Responses to our Relevant Representations [PDA-008] "A commitment to undertake these surveys will be included in an update of the Outline Onshore Construction Method Statement (APP-227) which will be submitted to the Examination. The Outline Onshore Construction Method Statement forms part of the Code of Construction Practice (CoCP).	The Applicant notes and welcomes the response.

Reference	Written Submission Comment	Applicant's response
	The CoCP is secured by Requirement 9 of the draft DCO." We are therefore satisfied that the mechanism is in place to ensure that WFD impacts on fluvial geomorphology elements can be avoided. However, in deferring this information to the post-consent stage, the Applicant should be aware that some of the crossing methods proposed may not be appropriate, or acceptable, at certain locations if the information demonstrates there may be potential impacts on WFD waterbodies.	
REP1-056.252	3.3 Air Quality 3.3.1 F3.10 Environmental Statement - Air Quality [APP-073] 289. As noted in our Relevant Representations (3.3.1), we raised a query with regards to the traffic assessment that there is no proposal/justification included to scope traffic out for construction and decommissioning as is for operational and maintenance phases on ecological receptors. We welcome the points of clarification provided by the Applicant in their Response to our Relevant Representation "there are no road links where the change in AADT exceeds 1000 vehicles. There are seven road links (the A55 between junction 23 and 27a) where the number of HDVs could increase by up to 205 HDVs however there are no European sites within 200 m of these road links. All other road links have an increase of less than 200 HDVs. The Air Quality assessment concludes that the NO2 emissions from construction traffic are negligible at all receptors (paragraph 10.8.3 Volume 3, Chapter 10: Air Quality (APP-073)). There will be no change in the annual mean NO2 concentrations at any of the receptors as a result of the Mona Offshore Wind Project, when compared to the annual mean NO2 concentrations without the Project; and given that all of the ecological receptors are further from the A55 than the modelled receptors, it can be concluded that there would be no effects on the sections of ancient woodland nearest to the A55." We have no further concerns with this aspect.	The Applicant notes and welcomes the response.
REP1-056.253	290. We are satisfied with the assessment of dust impacts (section 10.8.2) and proposed mitigation measures with regards to protected sites within the Outline Dust Management Plan [APP-214] to form part of the CoCP [APP-212]. We also note that the final CoCP (Requirement 9 of the DCO) will be approved by the	The Applicant notes and welcomes the response.

Reference	Written Submission Comment	Applicant's response
	Local Planning Authority (LPA) following consultation with NRW (A). We agree with this approach.	
REP1-056.254	291. In regard to air quality, we note that the works will be within the proximity of Ancient Woodland. Edition 12 of Planning Policy Wales recognises the significant value of ancient woodlands and makes provision for their protection against damage or loss. Our standing advice to all planning proposals that may affect (directly or indirectly) ancient woodland can be found on the NRW website under "Advice to planning authorities considering proposals affecting ancient woodland". The LPA will be able to advise with respect to the acceptability of the proposals in terms of Ancient Woodland.	The Applicant notes and welcomes the response.
REP1-056.255	3.4 Ecology (Terrestrial) 3.4.1 Ornithology 292. In our Relevant Representation (3.4.1.1) we raised concerns with regards to Barn Owl. We note the Applicant's Response to our Relevant Representation in that respect and the detailing of the survey undertaken. It is also noted "On the basis that no barn owls were recorded during the surveys, an assessment for impacts on barn owl was not undertaken in Volume 3, Chapter 4: Onshore and intertidal ornithology (APP-067) as it was not considered that there would be any impact on barn owls arising from construction and operation of the onshore elements on the Mona Offshore Wind Project." We also note the commitment to undertake pre-construction surveys where vegetation removal is proposed during the breeding bird season and if barn owl is recorded during the pre-construction surveys, mitigation measures from the Breeding Bird Plan will be implemented.	The Applicant notes and welcomes the response.
REP1-056.256	293. Therefore, we agree with the conclusions in the ES Onshore and intertidal ornithology [APP-067] and the recommendations and proposed principles for mitigation as set out in the Bird Protection Plan of the Outline Landscape and Ecology Management Plan (LEMP) [APP-208]. We also note that the final LEMP (Requirement 12 of the DCO) will be approved by the LPA following consultation with NRW (A). We agree with this approach.	The Applicant notes and welcomes the response.

Reference	Written Submission Comment	Applicant's response
REP1-056.257	3.4.2 Protected Species 294. We consider the survey and assessment to be satisfactory in respect of great crested newts (GCNs), bats, otters, dormice, water voles. Water voles are protected under the Wildlife and Countryside Act 1981 (as amended). GCNs, bats, otters and dormice are also European Protected Species (EPS) which are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). We consider that, subject to implementation of appropriate mitigation, the works are unlikely to be detrimental to the favourable conservation status of the species referred to above.	The Applicant notes and welcomes the response.
REP1-056.258	295. We agree with the conclusions in the ES Onshore Ecology (ref F3.3) [APP-066] and the recommendations and proposed principles for mitigation in the Outline Landscape and Ecology Management Plan (LEMP) [APP-208]. We also note that the final LEMP (Requirement 12 of the DCO) will be approved by the LPA following consultation with NRW. We agree with this approach. However, we advise the following amendments to the Outline LEMP in order to demonstrate that the proposal would not be detrimental to the favourable conservation status of protected species: These are as follows: Ecological Compliance Audit: • As the Ecological Clerk of Works will be involved in advising contractors on the implementation of the mitigation, we advise that an appropriate external body be appointed specifically for undertaking compliance audits (i.e. to confirm that the mitigation has been completed appropriately) and advise that this commitment is clearly stated in the Outline LEMP. • The Outline LEMP should clearly state that the compliance audit shall include identified key performance indicators (KPI's) for each identified ecological feature. We are satisfied for the detailed KPI's to be agreed as part of the agreed Final LEMP. • The Outline LEMP should clearly state that the frequency and dissemination of compliance audit reports will need to be agreed as part of the Final LEMP.	The Outline LEMP has been updated accordingly.

Reference	Written Submission Comment	Applicant's response
REP1-056.259	Long-term monitoring for GCNs: • We advise that revised details regarding long-term monitoring are submitted. The Outline LEMP should be updated to include a commitment that monitoring of the mitigation areas shall be carried out annually throughout operational phases of the scheme unless otherwise approved by the discharging authority. In the event of the freehold transfer of the ecology area to another party/body, the duration of post development surveillance should be set at 25 years as the basis for informing financial assessments. Long-term management plan for GCNs: • We advise that the Outline LEMP is updated to confirm that the following information will be specified in the final LEMP: i. habitat management prescriptions for aquatic and terrestrial habitats; ii. site liaison, wardening, incident reporting and response arrangements; iii. provision for periodic review mechanism for the long-term management plan; iv. contingency measures that are capable of being implemented in the event of failure to undertake or appropriately implement management or surveillance prescriptions including any required actions arising from unforeseen situations; v. current and proposed changes to tenure of the ecology area to be approved by the discharging authority in consultation with NRW to ensure appropriate control over the land is established and the effective targeted delivery of long-term actions; vi. details of persons or bodies responsible for undertaking management and surveillance together with required skills and competencies; and vii. reporting requirements associated with species surveillance and habitat management.	The Outline LEMP has been updated accordingly.
REP1-056.260	3.4.3 Fish (Freshwater) 296. We agree with the conclusions in the ES Onshore Ecology (ref F3.3) [APP-066] and the recommendations and proposed principles for mitigation for fish (eels) in the Outline LEMP (LEMP) [APP-208]. We also note that the final LEMP (Requirement 12 of	The Applicant notes the response.

Reference	Written Submission Comment	Applicant's response
	the DCO) will be approved by the LPA following consultation with NRW. We agree with this approach.	
REP1-056.261	3.4.4 Designated Sites 297. We note the design of the cable corridor is for an avoidance of impact to sensitive ecological receptors and when this is not possible there is a commitment to trenchless techniques under Traeth Pensarn Site of Special Scientific Interest (SSSI) and Llanddulas Limestone and Gwrych Castle Wood SSSI as stated in Table 3.22 of the Onshore Ecology report [APP-066]. Micro-siting of the route will be detailed in the Outline Landfall Construction Method Statement [APP-226] and Outline Construction Method Statement [APP-227] as they are progressed as part of the overarching Outline Code of Construction Practice (Requirement 9 of the DCO). We also note the commitments in Outline LEMP [APP-208] as part of the final LEMP (Requirement 12 of the DCO). Both Requirements 9 and 12 will be approved by the LPA following consultation with NRW. We agree with this approach.	The Applicant notes the response.
REP1-056.262	3.4.5 Invasive Non-Native Species (INNS) (Terrestrial) 298. Further to our comments (3.4.5 of our Relevant Representation) on Outline Biosecurity Protocol (APP-223) we note the Applicant's Responses to our Relevant Representations [PDA-008] and welcome these clarifications. We note that the (terrestrial) Biosecurity Protocol will be approved by the LPA (Requirement 9 under CoCP). We agree with this approach and consider that this will appropriately manage INNS. However, we advise that NRW (A) is consulted prior to the discharge of Requirement 9.	The Applicant notes the response.
REP1-056.263	3.5 Water Quality (Surface and Groundwater) 3.5.1 F3.1 Geology, Hydrogeology and Ground Conditions [APP-064] 299. NRW (A) note the Applicant's Responses to our Relevant Representations [PDA-008] and our comments remain on the whole the same.	The Applicant notes the response.
REP1-056.264	300. We note the completion of a water feature survey and on the whole are satisfied with the baseline condition assessments. However, it is noted that private water supplies (PWS) located	The Outline Code of Construction Practice has been updated accordingly (J26 F02, paragraph 1.10.4.9).

Reference	Written Submission Comment	Applicant's response
	within this area. (PWS 02, 06, 07 and 08) require further site investigation and for mitigation measures to be agreed with the PWS owners – we should be informed of the mitigation measure employed so that the risk is assessed on site. We note from RR-011.125 of PDA-008 – "measures to mitigate potential impacts on private water supplies will be set out in the final CoCP in line with section 1.4 of Volume 7, Annex 1.2: Groundwater Sources of Supply – Hydrogeological Risk Assessment (APP-116) and will be agreed with the relevant planning authority (rather than the landowner) following consultation with NRW (as secured in Requirement 9 of the draft DCO (C1 Draft Development Consent Order F03))". We agree with this approach.	
REP1-056.265	301. We note that the method used on site for the trenchless cable routing will be confirmed at the detailed design stage. Once the trenchless method(s) has been confirmed all the risk assessments to controlled waters (groundwaters) should be updated to consider this method. We note RR-011.126 of PDA-008 and welcome the approach.	The Outline Onshore Construction Method Statement has been updated accordingly (J26.15 F02, section 1.11.2).
REP1-056.266	302. Cable routing around the historical landfill will be by trenchless cable routing methods (likely Horizontal Direction Drilling), we previously asked for confirmation and a commitment that risks will be assessed to ensure the waste material and landfill engineering is not affected or impacted by the trenchless methods – this will prevent (minimise) the risk to controlled waters. We note RR-011.127 of PDA-008 and welcome the approach.	The Outline Landfall Construction Method Statement has been updated accordingly (J26.14 F02, paragraph 1.10.4.4).
REP1-056.267	303. Reference is made to working near an old mine in Outline Onshore Construction Method Statement [APP-227]. We previously asked that confirmation should be provided whether or not grouting will be required to be protective of groundwater and limit the risk to controlled waters. We note RR-011.128 of PDA-008 and welcome the approach.	The need for grouting will be determined during the detailed design stage. The design process will be informed by site investigations. Appropriate construction methods will be identified to ensure groundwater is protected and new pollutant pathways are not created. The detailed construction methods and mitigation measures will be reported in the final Onshore Construction Method Statement (J26.15 F02).
REP1-056.268	304. We, therefore, consider all of the above are minor amendments that should be made to the Outline Code of Construction Practice [APP-212] and the underpinning Outline Method Statements and Management Plans in order to ensure that	The applicant has included the above recommendations requested by NRW in updating the relevant management plans (see REP1-056.264 to REP1-056.267).

Reference	Written Submission Comment	Applicant's response
	the final version of the plan is based on a more robust Outline versions.	
REP1-056.269	305. We note that the final Code of Construction Practice [APP-212] and the underpinning Method Statements and Management Plans must be submitted to and approved by the LPA (Requirement 9). We agree with this approach and consider that impacts on water quality (both surface and groundwater) will be appropriately managed and suitable mitigation measures will be adopted. We advise that NRW (A) is consulted prior to the discharge of Requirement 9.	The Applicant notes NRW's response. NRW are already a consultee for the discharge of the outline code of construction practice as set out in Requirement 9(1), Schedule 2 of the draft development consent order (C1 F04).
REP1-056.270	3.6 Flood Risk 3.6.1 F3.2 Environmental Statement Hydrology and Flood Risk [APP-065] 306. Further to our previous comments for the Relevant Representation, with regards to flood risk, we have reviewed the relevant sections of the Applicant's Response to Relevant Representations (Document Reference: MOCNS-J3303-JVW-10218. June 2024). These would be Reference numbers RR-011.131 to RR-011-140. It is appreciated that the Applicant has noted comments provided by NRW (A) and actioned accordingly.	The Applicant notes the response.
REP1-056.271	307. It is important to remind all interested parties that NRWs remit on flood risk is associated with that risk posed from the Sea and Rivers as shown on the Flood Map for Planning (FMfP). Since the implementation of the Floods and Water Management Act 2010 in Wales, it is the local authorities acting as the Lead Local Flood Authority (LLFA), who manage flooding from ordinary watercourses, surface water (and ground water). Thus, it is the LLFA who are ultimately responsible for managing and advising on flood risk management related to Ordinary watercourses/Surface water and small watercourses. They would also advise/approve surface water management and normally as they are also the Sustainable Drainage Systems Approval Bodies (SABs). Thus, the views and comments from both Conwy County Borough Council and Denbighshire County Council should be sought on the documents relating to flood risk as they are the LLFA and the SAB in this instance.	The Applicant notes the response.

Reference	Written Submission Comment	Applicant's response
REP1-056.272	308. With regard to paragraph 2.3.8.18, we are still awaiting confirmation from Welsh Government as to when the new Technical Advice Note (TAN) 15 will be published. The 2004 TAN15 remains the Policy in force.	The Applicant notes the response.
REP1-056.273	309. With regard to table 2.7. Assessment of significant effects - Construction phase – we note and accept that the landfall will be installed using trenchless techniques. It should be noted that this is the only section of the Mona Onshore Development Area that is shown to be within the Flood Zones 2 and 3 for flood risk from the Sea or Rivers as per the FMfP.	The Applicant notes the response.
REP1-056.274	310. With regard to section 2.7.2.2 - any temporary change in runoff over the areas affected during construction, such as temporary construction compounds, haul road, construction accesses will be subject to sustainable drainage systems approval from the respective SAB to ensure that changes and minimal/managed.	The Applicant notes the response.
REP1-056.275	311. With regard to section 2.7.2.4 - whilst all watercourse crossings for the haul road are on ordinary watercourses (and subject to consent from Conwy CBC/Denbighshire CC as Lead Local Flood Authorities), we suggest that bridged (or clear span) crossings would be preferrable to culvert crossings. It should be noted that culverting of watercourses (regardless of length) may pose a high risk to the delivery of WFD objectives. On average the UK has one barrier to natural processes and ecosystem communities per kilometre of watercourse. The majority of those barriers are culverts. Physical modification (e.g. culverting) remains a high risk in the majority of Welsh catchments and the primary cause of waterbody failure is physical modification.	Individual watercourse crossing design will be confirmed during detailed design in consultation with the LLFAs but NRWs preference for bridged (or clear span) crossings is noted.
REP1-056.276	3.6.2 Flood Consequence Assessments [APP-117] 312. No further comments to those provided previously for the PEIR, our comments have been addressed and thus the relevant risk management authority (LLFA/SAB) should provide any additional advice.	The Applicant notes the response.

Reference	Written Submission Comment	Applicant's response
REP1-056.277	3.6.3 Surface watercourses and NRW Flood Zones [APP-118] 313. We note that Annex 3.10 Applicant's Response to our Relevant Representation [RR-011.138; PDA-018] has also been compiled to provide an update to the flood risk maps in relation to the Flood Map for Planning and specifically the Surface Water and Small Watercourse mapped outlines. Figures 1.3 to 1.5 of Volume 7, Annex 2.2 have been updated. A minor point would be that the same colour banding used in the on-line mapping would be clearer i.e. Sea- green; rivers- blue and Surface water and Small watercourses- purple (Flood Map for Planning (naturalresources.wales) 'detailed view')	The Applicant notes the response.
REP1-056.278	3.6.4 Outline Flood Management Plan (OFMP) [APP-219] 314. This document is adequate to manage flood risk as an appendix to the Outline Code of Construction Practice document (Ref J26) [APP-212] for flood risk from the sea at landfall location.	The Applicant notes the response.
REP1-056.279	315. However, there will be flood risk associated with the small watercourses/ordinary watercourses as a result of the onshore development route. It may be appropriate to also consider flood risk from these sources as shown on the Flood Map for Planning Flood zones 2 and 3 for Surface water and Small Watercourses. The respective LLFA would be able to advise if the management plan for this source of flood risk can be managed in any updated OFMP.	The Applicant is committed to engaging with the LLFA's regarding flood risk through the examination.
REP1-056.280	3.7 Materials and Waste 316. NRW (A) notes that the final Site Waste Management Plan [APP-221] will be approved by the LPA. We agree with this approach and consider that waste will be appropriately managed. NRW (A) should be consulted on the final Site Waste Management Plan [APP-221] as part of the Code of Construction Practice [APP-212] prior to discharge of Requirement 9.	Noted. NRW are already a consultee for the discharge of the outline code of construction practice as set out in Requirement 9(1), Schedule 2 of the draft development consent order (C1 F04).
REP1-056.281	4 MARINE LICENSING 317. The Welsh Ministers have delegated functions for the administration and determination of Marine Licence applications under Part 4 of the Marine and Coastal Access Act 2009 to Natural Resources Wales (NRW). The representation below is provided by NRW's, Marine Licensing Team function (NRW MLT).	The Applicant notes the response.

Reference	Written Submission Comment	Applicant's response
REP1-056.282	4.1 The Marine Licence proposals: 318. As set out within the Marine Licence Principles Document (PDA-005), two Marine Licences are sought for the Mona Offshore Wind Project; • A Licence in respect of the Generation Assets, to be deemed as part of the Development Consent Order (DCO) • A separate Licence in respect of the Transmission Assets to be determined by NRW MLT.	The Applicant notes the response.
REP1-056.283	319. NRW MLT agrees with the Applicant that the DCO sought may, in principle, include provisions deeming a Marine Licence to have been issued for those marine licensable activities that are wholly within Welsh Offshore Waters in accordance with s149A of the Planning Act 2008. The Transmission Assets are located within both the Welsh inshore and offshore region and therefore cannot be deemed as part of the DCO and a separate Marine Licence is required for which NRW MLT is the determining authority.	The Applicant notes the response.
REP1-056.284	320. The Applicant submitted a Marine Licence application in respect of the Transmission Assets to NRW MLT on the 29 April 2024. The application was validated on the 31 May 2024. NRW MLT have consulted with relevant consultation bodies and the public on the application who have until 19 August 2024 to provide any comment. It is anticipated that this application will be determined concurrently with the DCO examination, although it is currently not possible to provide an indicative timescale in respect of the determination. Although there are issues that substantively overlap between the determination of the DCO and the Transmission Assets Marine Licence application, it should be noted that the respective consents must be determined separately.	The Applicant notes the response.
REP1-056.285	321. NRW MLT, has determined that an Environmental Impact Assessment is not required in relation to the Marine Licence for the Transmission Assets in reliance on Regulation 10 of the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended). This is on the basis that we are satisfied that an EIA assessment in respect of the project is to be carried out by the Secretary of State and that such assessment will be sufficient to meet the requirements of the EIA Directive. NRW MLT must take	The Applicant notes the response.

Reference	Written Submission Comment	Applicant's response
	into account inter alia the conclusions of the Secretary of State's assessment, any conditions attached to the DCO, and mitigation and monitoring measures. It should be noted that a practical consequence of this is that we would not be in a position to conclude the determination of the Marine Licence application for the Transmission Assets until the DCO has been issued.	
REP1-056.286	322. NRW MLT, in its delegated role as Licensing Authority, will be responsible for determining requests to discharge conditions of a Marine Licence and therefore have a keen interest in ensuing that the provisions drafted in a deemed Marine Licence are appropriate to allow it to exercise this function.	The Applicant notes the response.
REP1-056.287	323. Although a number of Marine Licences have been deemed within DCOs in English Waters, this is the first deemed Marine Licence that has been sought in Welsh Waters and where NRW MLT is making representations and providing advice to the ExA as to how the deemed Marine Licence should be considered.	The Applicant notes the response.
REP1-056.288	324. As detailed within our Relevant Representations [RR-011], NRW MLT provided the Applicant with NRW's template Marine Licence and condition bank to aid with drafting. However, the Applicant has chosen to use previously deemed Marine Licences issued in English waters as their template for the proposed deemed Marine Licence. Although we are not fundamentally opposed to this approach, due to the minimal pre-application engagement in regard to the drafting of the Licence there remains a number of outstanding comments and concerns in respect of drafting. The Applicant has provided a Response to Relevant Representation [PDA-008] and an updated Draft Development Consent Order [PDA-003] which has been considered. The Written Representation below contains the key concerns surrounding the drafting of the Licence, whilst a number of further comments on the drafting are provided in Annex D.	The Applicant notes the response.
REP1-056.289	4.2 Decommissioning 325. Within our Relevant Representation (RR-011) we requested clarity surrounding the Applicant's proposed approach to licensable decommissioning activities.	The Applicant notes the response.

Reference	Written Submission Comment	Applicant's response
REP1-056.290	326. Within the 'Applicant's Response to Relevant Representations' [PDA-008], the Applicant has clarified that the deemed Marine Licence does not include provision for decommissioning and has acknowledged that it will need to apply and secure a separate Marine Licence for licensable decommissioning activities prior to decommissioning taking place. NRW MLT are content with this proposed approach to licensable decommissioning activities.	The Applicant notes the response.
REP1-056.291	327. NRW MLT acknowledges that the Applicant has amended the Marine Licence Principles Document [PDA-005] to clarify this. However, the Applicant has not, to date, removed reference to the inclusion of an expected condition relating to a decommissioning plan as part of the Transmission Asset Marine Licence within the Principle Document. This should be corrected, as neither has decommissioning activities been requested as part of the Transmission Marine Licence Application.	The Marine Licence Principles Document (J9 F03) has been updated to reflect this comment.
REP1-056.292	4.3 Transfer of the Licence 328. Para 7 of Schedule 14 (deemed Marine Licence) of the draft DCO proposes to amend the provisions under section 72 of the Marine and Coastal Access Act (MACAA) 2009 for the transfer of the Marine Licence. Specifically, the Applicant proposes that the powers to transfer should be given to the Secretary of State instead of the Licensing Authority.	The Applicant refers to the Applicant's Response to Relevant Representations (PDA-008), rows RR-011.154 to RR-011.156. The Applicant has sought to update the drafting of Article 7 of the draft development consent order (C1 F04) to align it with the draft development consent order submitted for the Morgan Offshore Wind Project Generation Assets such that it is no longer possible to transfer or grant part of the deemed marine licence in Schedule 14 (it can only be transferred or granted as a whole).
REP1-056.293	329. Within our Relevant Representation we requested the Applicant provide further explanation and justification as to the need and lawfulness of this provision. This has been provided within 'Applicant's Response to Relevant Representations' [PDA-008].	
REP1-056.294	330. NRW MLT has concerns as to whether the inclusion of such provision would be appropriate.	
REP1-056.295	331. Firstly, NRW MLT have concerns in respect of whether a deemed Marine Licence can lawfully include such a provision. This is upon the basis that the power under s120(5)(a) relied upon by the Applicant can only relate to 'any matter for which provision may	

Reference	Written Submission Comment	Applicant's response
	be made in the order'; (our emphasis). The provisions for transfer of a marine licence are not explicitly dealt with under the Planning Act 2008. Rather it is controlled by provisions under a separate Act of Parliament (s72 MACAA 2009). On this basis, NRW MLT's concerns are that absent of any explicit provisions in the Planning Act 2008, such provisions for transfer of licences may not be lawfully made.	
REP1-056.296	332. Secondly, should the ExA disagree with the above, inclusion of such transfer provisions in the deemed Marine Licence would deviate from the established practice under the MACAA 2009. It is a matter of good regulation that regulatory overlap and/or duplication should be avoided. The implications of including the requested transfer provisions in the deemed Marine Licence could effectively provide two extant regulatory regimes (the deemed Marine Licence itself, and the section 72 (MACAA 2009) for the transfer of licence) which could lead to uncertainty. In our view, the established and correct approach in such circumstances would be to defer to the most appropriate regulatory regime which in our view would be under section 72 of the MACAA 2009.	
REP1-056.297	333. We also highlight that the inclusion of such provision would result in differentiating the arrangements for transfer for the generation/transmission Licences for the project.	
REP1-056.298	4.4 Overlap between the generation and transmission Licences 334. The Marine Licence Principles Document [PDA-005] states that there is intentional overlap between the generation and transmission Licences in relation to the authorisation of offshore substation platforms and the inter-connector cables, which are duplicated within both Licences. The reason given being, that the location of the offshore substation platforms at this stage are unknown, likewise it is unknown at this stage whether the offshore substation platforms and inter-connector cables will be transferred to the Offshore Transmission Operator alongside the Transmission Assets in future.	This response is noted. To provide further clarity on this, the draft development consent order (C1 F04) has been updated at Condition 18(1)(a) to include a new limb (ii) requiring the undertaker to state in the design plan, being submitted to the licencing authority for approval, whether Work No. 1 sub-sections (c) (the offshore substation platforms) and (d) (the interconnector cables) are to be constructed under the deemed marine licence.
REP1-056.299	335. As detailed within our Relevant Representation we sought clarity on how the deemed Marine Licence was seeking to address	

Reference	Written Submission Comment	Applicant's response
	this overlap, specifically in ensuring that the deemed generation and transmission Licences, when taken together, do not authorise the construction of more than four offshore substation platforms.	
REP1-056.300	336. A response has been provided within 'Applicant's Response to Relevant Representations' [PDA-008] confirming that the deemed Marine Licence contains provision for a design plan to be submitted for approval by the Licensing Authority prior to commencement of works. Amongst other things, the design plan would contain detail of the number of offshore substation platforms. NRW MLT are satisfied with this approach and request that the Explanatory Memorandum for the DCO is updated to reflect this approach in relation to condition 18(a) of the deemed Marine Licence.	
REP1-056.301	4.5 Pre-commencement works 337. As drafted, works relating to pre-construction including ground investigation and UXO clearance would not fall under the definition of commencement, despite their potentially intrusive nature and associated risk. As currently drafted, pre-commencement work could be carried out without the need to adhere to other relevant conditions of the deemed Marine Licence including pollution prevention practices, notices to mariners and approval of appropriate plans such as biosecurity and/or method statements.	See the Applicant's response in rows REP1-056.421 to REP1-056.422.
REP1-056.302	338. Consequently, NRW MLT requests that the definition is amended so as to ensure that appropriate requirements and controls are engaged. Including but not limited to, conditions 18 and 21 of the deemed Marine Licence which relate specifically to activities currently defined as pre-commencement activities.	
REP1-056.303	339. NRW MLT previous practice has included the following definition in relation to commencement within existing marine licences - "the first undertaking of any Licensed Activities".	
REP1-056.304	4.6 Consistency between NRW Transmission Licence and Generation Licence 340. In respect of the Marine Licence Principles Document [PDA-005], the Applicant has detailed conditions it would anticipate being incorporated within the Marine Licence for the Transmission Asset (based on review of previous Marine Licences issued in Wales),	See the Applicant's response in rows REP1-056.419 to REP1-056.436.

Reference	Written Submission Comment	Applicant's response
	and has compared these with those presented within the deemed Marine Licence for the Generation Assets. NRW MLT in our relevant representation noted that some conditions which are detailed as anticipated within the Transmission Licence, are omitted from the deemed Marine Licence. NRW MLT continue to advise the Applicant on the drafting of the deemed Marine Licence so as to ensure consistency where possible. Full comments relating the draft deemed Marine Licence are presented within Annex D.	
REP1-056.305	341. In respect of the 'Applicant's Response to Relevant Representations' [PDA-008], the Applicant notes that they do not consider a Compliance Report necessary for the deemed Marine Licence, detailing that it would be unnecessary and burdensome. NRW MLT disagree and consider that a Compliance Report is reasonable and necessary and is in line with established practice for licences of a similar scale in Wales including Awel-y-Môr. The report does not require the Applicant to carry out any additional assessment only to identify and signpost approved reports and approved plans to confirm relevant conditions have been met prior to each phase of construction. NRW MLT consider that this document would be particularly beneficial where the Applicant seeks to carry out works in stages, allowing the Applicant to highlight which plans are relevant to any particular activity or stage of development. NRW MLT consider this should be information that the Applicant should have readily available.	See the Applicant's response in row REP1-056.436.
REP1-056.306	4.7 Approval of Plans 342. Condition 19(2) of the deemed Marine Licence provides that NRW must determine an application for approval made under condition 18 (pre-construction plans and documents) within a period of four months commencing on the date the application is received by NRW. Similar provision has been included in condition 20(3) and 21(3).	See the Applicant's response in row REP1-056.427.
REP1-056.307	343. Within 'Applicant's Response to Relevant Representations' [PDA-008] the Applicant set out that they consider the condition necessary to assist in maintaining the project delivery programme.	

Reference	Written Submission Comment	Applicant's response
REP1-056.308	344. However, NRW MLT maintain our position, and do not consider the condition reasonable and necessary. There are no provisions under MACAA2009 for such time limits and it would not be consistent with NRW MLT's established practice to constrain its determination to a defined period. As such, the inclusion of such provision would provide for regulatory divergence with other Marine Licences in Wales. Specifically, and important to note that NRW MLT will not be including such provision in respect of the Transmission Marine Licence required for this project.	
REP1-056.309	345. In addition, NRW MLT is unclear surrounding the enforceability of the condition.	
REP1-056.310	346. The time it takes NRW MLT to make a determination depends on the quality of the application made, complexity of issues and the consultation required with other organisation and technical experts. In some instance this requires further information or updated documents to be supplied from the Licence Holder as they seek resolutions with key stakeholders. NRW MLT seek to make its determination in a timely manner and would not seek to delay determination unnecessarily.	
REP1-056.311	347. Therefore, for the reasons stated above, we maintain our position and do not consider the condition necessary and should be removed from the deemed Marine Licence.	
REP1-056.312	4.8 Reference to NRW as the Licensing Authority 348. Within our Relevant Representation we requested that the 'Licensing Authority' is used throughout the deemed Marine Licence in place of NRW. We are satisfied that that the Applicant has taken account of our comment and has revised the deemed Marine Licence accordingly.	The Applicant notes the response.
REP1-056.313	4.9 Designation of Disposal Sites 349. The Applicant is proposing to designate a disposal site for disposal of material associated with the construction of the project. A site Characterisation Report has been provided for the Generation Asset [APP-205] and separate site Characterisation	The Applicant refers to the Applicant's Response to Relevant Representations (PDA-008), row RR-011.167.

Reference	Written Submission Comment	Applicant's response
	Report [APP-206] for the offshore cable corridor which is part of the Transmission Assets.	
REP1-056.314	350. It is established practice for NRW MLT to consider the designation of a disposal site and the suitability of material for disposal at sea during the determination of the Marine Licence application. As part of this determination NRW MLT would consult with independent external scientific advisors for specific advice on whether sufficient information has been provided for the designation of the disposal site; whether sufficient sampling has taken place by the Applicant; whether the sampling has indicated that material is suitable for disposal at sea, and whether further monitoring will be required during the course of the Licence, in line with OSPAR guidelines. If this advice has not be sought by the ExA we would need to consider this further.	
REP1-056.315	351. Where a disposal site is designated, a unique disposal site code would be allocated to the site by Cefas (Centre for Environment, Fisheries and Aquaculture Science) who has been appointed to maintain an active list of all open and closed or disused sites in UK waters and allocate a unique reference to each site. NRW MLT would then include reference to this disposal site within the Marine Licence. As this is the first deemed Marine Licence issued in Wales, NRW MLT would seek clarity from the ExA as to whether it is their intention to seek to designate the disposal site and obtain the appropriate disposal site code from Cefas during the determination of DCO and deemed Marine Licence.	
REP1-056.316	352. We welcome that the Applicant, following our relevant representation, has provided their sediment sampling results within the proforma provided on our website [PDA-014 to PDA-017] which aids with OSPAR reporting should the application be positively determined.	
REP1-056.317	353. Following discussion with the Applicant, it is our current understanding that the sediment sampling [PDA-014 to PDA-017] that has been carried out in relation to disposal of material for the generation assets have also been provided to NRW MLT as it is	

Reference	Written Submission Comment	Applicant's response
	also relevant to the determination of dredge disposal associated with the Transmission Marine Licence. As such, NRW MLT, will be seeking independent external scientific advice particularly in understanding whether sufficient sediment sampling has taken place, and whether the sampling has indicated that the material is suitable for disposal at sea in line with OSPAR guidelines. NRW MLT would be able to share this response with the ExA.	
REP1-056.318	4.10 Enforcement Authority 354. As detailed within our Relevant Representation the enforcement provisions in respect to conditions of a Marine Licence have not been delegated to NRW and remain with Welsh Government. This has been correctly identified within the deemed Marine Licence itself (Schedule 14 of the DCO); however, the Environmental Statement Chapter 2 Policy and Legislative Context [APP-049 - section 2.3.3.2], incorrectly refers to NRW as the Enforcement body in respect to conditions of the Marine Licence. This has been acknowledged by the Applicant within 'Applicant's Response to Relevant Representations' [PDA-008] and we are satisfied with this response.	The Applicant notes the response.
REP1-056.319	**Annex B – SLVIA Detailed Comments** 355. Our advice is structured to address the following matters: Our comments on the Applicant's Response to NRW (A)'s Relevant Representations The effects of the Mona Array on the views and visual amenity of visual receptors within the Isle of Anglesey National Landscape; Landscape/Seascape Character within the IoA NL; and Special Qualities of the IoA NL. The effects of the Mona Array on the views and visual amenity of visual receptors within the Eryri National Part; Landscape/Seascape Character within the ENP; and Special Qualities of the ENP. Potential effects of the Mona Array on receptors within the Clwydian Range and Dee Valley National Landscape Potential effects of the Onshore Substation on receptors within the CRDV NL. Cumulative Effects	The Applicant notes NRW's comments and has responded to each point below.
REP1-056.320	1.1. Applicant's Response to NRW's Relevant Representations 356. The Applicant has provided a written response [PDA-008, PDA-011] to our Relevant Representations [RR-011].	The Applicant notes NRW's response.

Reference	Written Submission Comment	Applicant's response
REP1-056.321	357. Based on the Applicant's Response, it is apparent that one of the key differences in opinion between NRW (A) and the Applicant concerns the extent to which the distance between the Mona Array and the IoA NL and ENP mitigates harm to receptors within these SDLs.	The Applicant notes NRW's response.
REP1-056.322	358. Regarding potential effects on the IoA NL, the Applicant cites the distance of 29km or more between the Mona Array and the IoA NL as a reason why they consider effects on receptors within this landscape would not be significant. We advise that distance in itself is only one factor in predicting the level of impact.	Distance is only one of the factors which can affect visibility, and subsequently the magnitude, of the impact. The perceptual magnitude of a whole windfarm is a separate issue and depends on the way individual impacts accumulate. As explained in OESEA4 (DBEIS, 2022), paragraph 5.8.2, which considers the limit of visual perception from the coast "*The visibility of structures at distance from the coast is dependent upon a series of compounding factors including atmospheric / meteorological conditions (haze, precipitation, fog), the chromatic contrast of structures at sea and their surroundings (i.e. sea and sky), the arrangement /complexity of offshore activities, and also the structure height (dipping height) of offshore objects which may be above the level of a given horizon…*". In line with OESEA4, the magnitude of impact from the Mona Array Area on the IoA NL took account of the following factors, alongside distance: • curvature of the earth • object characteristics (including the height and dimensions of all proposed offshore infrastructure) • visual acuity • atmospheric conditions (air clarity, air humidity, the background cloud cover, haze, the degree, direction and elevation of sunlight which can reduce the contrast, even at distances within the range of visibility). Seascapes are hugely altered by weather conditions, to a far greater extent than any terrestrial, rural or urban environment. An airmass at a longer distance over a water mass is more humid, than an airmass (with the same temperature) over land. In contrast with a landscape, a large water surface is roughly of a uniform appearance. The sea plain offers few clues to help in judging how far away a particular point or element in the water lies. Distances are particularly difficult to judge when looking out to sea.

Reference	Written Submission Comment	Applicant's response
		Even in apparently clear summer conditions with sunny and clear skies, which is regarded as the best possible visibility scenario, the atmosphere can obscure distant objects, such as turbines, which appear fully in bright sunlight and absorbed by sun glitter when sunlight reflects off the surface of the sea / from waves. Specifically in relation to the area in which the Mona Array Area is located, OESEA4 (DBEIS, 2022) identifies the following: • OESEA4 (DBEIS, 2022) characterises English and Welsh waters on a scale of high to low - the Mona Array Area is in an area of lowest visibility from land (see Figure 5.48 on page 365 and Figure A1c.2) • due to the influence of haze, the visual range for Wales is between 19.5 km (winter) and 26km (spring and summer) (see Table 5.26 on page 367) • at Rhyl weather station, the visibility distance was 26 to 30 km for 47.9% of days, and at 35 km for 27.9% of days (see Table 5.27 on page 368) In addition, the National Seascape Assessment for Wales (2015), which is referenced within OESEA4 (DBEIS, 2022), identifies that the Mona Array Area lies within the lowest visibility area. The White Consultants (2019) report explores haze and meteorological factors affecting a visual range. It quotes the SNH (2005) report (after Husar and Husar, 1998) in suggesting that haze may limit visual range in Wales to 26 km and makes reference to Met Office data, which indicate that visibility can exceed 35 km, albeit on limited days of the year. The White Consultants (2019) report also states that additional meteorological factors such as rainfall incidence, sunshine hours and propensity for fog can determine relative visibility of offshore structures and therefore turbines located 30 km from shore may be visible only on limited occasions when haze and precipitation are low, and sunshine remains bright. The proposed Mona Array Area lies 3 km beyond the visual range of Husar and Husar (1998), which is 26 km. If considering the visual range of 30 km with additional meteorological factors, then a small number of turbines (at a distance of around 30 km) would be discernible from the Great Orme's Head, located beyond the intervening turbines of the consented Awel y Môr offshore wind farm. A small number of turbines of the proposed Mona Array Area, which are located on its southwestern corner, would be perceivable from Point Lynas within the Isle of Anglesey AONB. Turbines located

Reference	Written Submission Comment	Applicant's response
		beyond 30 km are unlikely to be visible, except on limited occasions when haze and precipitation are low, and sunshine remains bright (as described in the previous paragraph). PDA-011 (Figure 1.1, sheet 1) shows the areas of the Mona Array Area which are within a distance of 30 km and 35 km respectively from the coast, where the turbines would be most visible. Only the closest turbines on the edge of the Mona Array Area facing the coast would be visible, with the rest fading away in correlation with the increase in distance. Even the outline of the closest turbines is expected to be blurred over such a long distance. A limited number of the proposed Mona Array Area turbines would appear as visible, discernible, and recognisable features, fitting the description of 'small magnitude' category presented in Table 1 of the White Consultants (2019) Stage 1 report, which is derived from the Guidance on the Assessment of the Impacts of Offshore wind Farms: Seascape and Visual Impact Report, Department for Trade and Industry, 2005 (DTI, 2005) report. The turbines behind those which are the closest to viewpoints, whether on the eastern coast of Anglesey or on the northern coast, would lack sharpness and appear indistinct, which is compliant with the 'very small magnitude' class, according to DTI (2005). Many of the representative viewpoints within SDLs are within a distance range of 29 km to 55 km and as stated in the SLVIA, some parts of the Mona Offshore Wind Project would be visible in favourable conditions (i.e. very good visibility 20 km to 40 km approximately 40% of the year. From some of these viewpoints, the Mona Offshore Wind Project would only be visible in the most favourable conditions (i.e. excellent visibility >40 km approx. 28% of the year, in cases where the acuity of eye allows such slim vertical structures to be distinguished over a long distance.
REP1-056.323	359. The height and size of wind turbines determines whether a distance is significant relative to a given receptor. In the case of this development, the proposed turbines would have a blade tip height of 364m above LAT. When viewed from locations within the IoA NL such as Trwyn Eilian (Point Lynas) (at 29km distance) turbines with a tip height of 364m will be obvious features within the view – with the number of turbines, the extent of view which they would occupy, and the rotation of turbine blades, combining to establish a new and obvious focal point that would attract attention. The characteristics of the development would contrast with the	The Applicant's response to REP1-056.323 provides a description of the factors which should be considered in defining the magnitude of impact. Whilst it is agreed that the distance and parameters of turbines (including both the height and diameter of its tower) are factors, these must also be considered alongside other factors (such as atmospheric conditions and visual acuity) and are therefore not determinative in defining the magnitude of the impact.

Reference	Written Submission Comment	Applicant's response
	inherent natural (undeveloped) qualities and beauty of the coast and views of the sea.	Based on the field survey the Applicant notes that at a distance of 30 km it would be difficult to discern the blade movement of turbines (see response to REP1-056.322). The characteristics of the Mona Array Area will not contrast with the qualities and beauty of the coast or views of the sea. The Mona Array Area will not appear in association with the landform of the coastal edge or coastal features, as it will appear as a barely discernible distant feature in the open sea.
REP1-056.324	360. NRW evidence7 provides further information on the implications of the ratio between the heights of turbines and the distance on the likelihood of significant effects on high sensitivity receptors such as SDLs. That evidence provides a 'very approximate ratio between turbine height and distance' for different magnitudes of change (low and medium) which when combined with a high sensitivity receptor are likely to result in an effect of 'moderate' significance or 'major-moderate' significance. With the former potentially being significant and the latter being significant in the 'vast majority of SLVIAs'. Those ratios are: 1:133 for an average low magnitude. 1:100 for an average medium magnitude.	As stated in White Consultants (2020; at paragraph 5.9) and White Consultants (2019; paragraph 5.10) the White Consultants (2019) study sets thresholds for magnitude of impacts for all offshore wind farms derived from analysis of wirelines. Other factors which should be considered when determining the magnitude of the impact, as noted in response to REP1-056.322, are not included in wirelines. Specifically, wirelines do not provide any reference features that enable the turbines' distance or height to be determined. Therefore, when determining the magnitude of impact, the assessor has to consider that the influence of the development's relationship with the coastline and coastal features, all of which are not evident in a wireline image. Wirelines also do not consider any other factors which influence the magnitude of impact (as noted in the Applicant's response to REP1-056.322). NPS EN-1 (DESNZ, 2024), NPS EN-3 (DESNZ, 2024) and OESEA4 (DBEIS, 2022) require account to also be taken of the effects of distance, context, atmospheric conditions. White Consultants (2020) does not apply the limit of visual perception when considering 'thresholds' for different turbine heights. As outlined in the Applicant's response to REP1-056.322, OESEA4 (DBEIS, 2022) characterises English and Welsh waters on a scale of high to low - the Mona Array Area is in an area of lowest visibility from land.
REP1-056.325	361. Applying these ratios to turbines with a 364m blade tip height results in: A likelihood of there being a Low magnitude of change and overall moderate effect on high sensitivity receptors at distances up to 48.4km. A likelihood of there being a Medium magnitude of change and overall moderate/major effect on high sensitivity receptors at distances up to 36.4km.	Please refer to the Applicant's response above to REP-056.322 to REP1-056.324.

Reference	Written Submission Comment	Applicant's response
REP1-056.326	362. These ratios are only a guide. But these illustrate the distances where significant effects are – as shown by evidence - expected to occur and to support our advice that 29km should not be assumed to be a significant distance when considering the impacts of turbines with a 364m blade tip height.	Please refer to the Applicant's response set out above to REP-056.322.
REP1-056.327	363. Other matters raised in the Applicant's written response [PDA-008, PDA-011] are listed below and are addressed in the subsequent paragraphs. Refinement of the Mona Offshore Wind Project Effects on the character and special qualities of the Isle of Anglesey National Landscape Effects on the settings of nationally designated landscapes Effects of the Mona Offshore Wind Project on visual receptors using the Wales Coast Path Combined and sequential cumulative effects experienced by users of the Wales Coast Path Relevant representation – paragraphs 3.1.1.7 to 3.1.1.9	The Applicant notes NRW's response.
REP1-056.328	1.2. Refinement of the Mona Offshore Wind Project 364. The Applicant states they have 'sought to avoid and mitigate significant landscape, seascape and visual impacts through the refinement of the Mona Offshore Project taking into account comments received during statutory consultation. The refinements included a reduction in the proposed Mona Array Area (from 500 km 2 to approximately 300 km2) and the maximum number of turbines was reduced from 107 to 96'8.	The Applicant notes NRW's response.
REP1-056.329	365. Notwithstanding the fact the maximum height of the turbines has been increased, we advise the reductions referred to in the Applicant's comments relate primarily to the northern and eastern parts of the order limits, i.e. areas which are furthest away from the IoA NL9. Referring to Figure 4.18 it appears the southern limit of the Array area has been moved northwards, but only by approximatively 2km, the benefit of which for receptors in the IoA NL would be undermined by the increase in turbine height (40m)10.	The Applicant notes NRW's response. The 40m increase in turbines' height would not result in any noticeable difference in this case where the development is located at a considerable distance in views on the vast sea horizon which offers few clues to help in judging distances and the scale of the turbines when looking out to sea. The Applicant notes that between the Preliminary Environmental Information Report (see Volume 4, Chapter 26: Seascape, landscape and visual resources) and Application for Development Consent, the turbine tip height was increased and Mona Array Area was reduced. These changes in project parameters has not altered the conclusions of the SLVIA.
REP1-056.330	366. In our comments on the PEIR, we advised further consideration should be given to NRW's evidence base: Seascape and Visual Sensitivity to Offshore Wind Farms in Wales: Strategic	The assessment methodology, outlined in Volume 6, Annex 8.4: Seascape, landscape and visual resources impact assessment methodology (APP-104) is informed by GLVIA3 and DTI (2005) Guidance., Reference is also

Reference	Written Submission Comment	Applicant's response
	Assessment and Guidance (White Consultants for NRW, March 2019). The evidence base is divided into 3 reports, which should be read together. We advised that further work was required to demonstrate how this guidance had been taken into consideration and informed the proposals. We do not consider this guidance has adequately informed the proposals. For example, the Stage 2 Report11 provides guidance on siting offshore windfarms, and Table 4.1 of this report identifies measures (Principles) to avoid or minimise seascape and visual effects. The proposals for the Mona Array are contrary to a number of these Principles because:	made to the three White Consultants reports which have been used to inform the Mona SLVIA assessment. The response below summarises how the three White Consultants reports have been considered in relation to the Mona SLVIA. **White Consultants (2019) Stage 1 Report** The White Consultants (2019) Stage 1 Report presents the recommended distances from National Parks and Areas of Outstanding Natural Beauty (NLs) in relation to different turbine heights of up to 350m to blade tip. As no offshore wind farm developments with turbines of 300 to 350 m have been built yet and in the absence of any relevant precedence, the Stage 1 study of White Consultants (2019) is based on wireline views which have several inherent limitations and are not intended as the sole basis for assessment (see the Applicant's response to REP-056.322 to REP1-056.324). The Applicant notes that White Consultants (2019) presents an increased magnitude of change correlating with the increased height of turbines, however it does not take into account other parameters of the turbine, such as its tower diameters, which do not correspondingly increase with turbine capacity (for example a 15 MW turbine tower has a base diameter of approximately 10 m, and a 20 MW turbine has a base diameter of approximately 12 m the difference of which will not be apparent at any distance). which will not be apparent at any distance). OESEA4 (DBEIS, 2022) identifies that turbines with a blade tip height of 350 m in a large-scale deployment scenario are significantly greater than the largest turbine models presently available (e.g. Vestas V236-15MW at 280 m, scheduled for production in 2024), and that for much of the time, visibility will not reach such distances, referencing a 30 km visibility range (see DBEIS (2022), Figure 5.50 at page 367). The White Consultants (2019) report does however explore haze and meteorological factors affecting a visual range. The Applicant provides a summary of this in response to REP1-056.322. The White Consultants (2019) Stage 1 report recognises that the significance of effect in Seascape and Visual Impact Assessments (SVIAs) is a judgement that will vary depending on a number of variables and criteria. The study states that visual buffers based on turbine height should be considered as part of seascape and visual impact along with several

Reference	Written Submission Comment	Applicant's response
		other contributing factors. OESEA4 (DBEIS, 2022) concludes that any consideration of thresholds/coastal "buffers" is too generalised an approach and does not take into consideration the many anthropogenic and natural variations along the coast and the variety of development scenarios which may take place (e.g. installation number, type, design and orientation). In practice development scenarios will vary for each individual wind farm and also the variables determining visibility for individual wind farms. **White Consultants (2019) Stage 2 Report** The White Consultants (2019) Stage 2 Report sets out a series of objectives and principles which seek to avoid or minimise seascape and visual effects. The Report has adapted siting principles from the 'Seascape and Visual Impact Assessment: Guidance for Offshore Wind Farm Developers' DTI (2005) and incorporated its Stage 1 report buffers within it. How the Mona Array Area applies to White Consultants (2019) Stage 2 siting principles is provided in response to REP1-056.332 below. However, as stated above in this response, the buffers and thresholds set by the White Consultants (2019) are not appropriate to be applied directly at project level (see OESAE4, page 26). **White Consultants (2019) Stage 3 Report** White Consultants (2019) Stage 3 presents the seascape and visual sensitivity assessment zones on Figure 7: 'Designated Landscapes, their seascape settings and their sensitivity to offshore wind farms' (page 10). The Mona Array Area is located within the Northern Wales and Irish Sea Round 4 offshore wind zone. The Round 4 offshore wind zone is located across areas of seascape and visual sensitivity zones (SSZ) of high, high/medium, medium and medium/low sensitivity. The Mona Array Area itself lies partly within SSZ 2 and partly within SSZ 5, both of which have been defined as the lowest sensitivity to offshore wind development within the Round 4 offshore wind zone, with a category of medium/low sensitivity.
REP1-056.331	367. The Array is not located 'beyond the limit of negligible visual effects, particularly for the highest sensitivity area National Parks/AONBs overlaid with Heritage Coasts'. (Principle 3).	The proposed Mona Array Area is located within a low visibility area of the sea from principal landscape designations (see the Applicant's response in row REP1-056.322). As noted within REP1-056.322, most of the proposed Mona Array Area extends beyond the limit of negligible visual effects, in views from both the northern coast and eastern coast of the Isle of Anglesey.

Reference	Written Submission Comment	Applicant's response
		The Applicant notes that the White Consultants (2019) defined 44 km buffer distance for large turbines exceeds the maximum realistic visibility range within which the turbines would be 'clearly visible'. Alongside the distance, the shape of the Mona Array Area determines that in limited areas, only the closest turbines of the array would be visible from the coast.
REP1-056.332	368. The Array is not located 'beyond the Stage I report low magnitude buffer distances for the highest potential turbine proposed from National Parks and AONBs' which is requested when Principle 3 is not achievable (48.4km for 364m turbines12). At the closest point the Mona Array is 28.8km from the IoA NL, 35.9km from the ENP, and 41.1km from the CRDV NL13. (Principle 4).	Principle 7 advises, for example, to locate developments in areas offshore from local seascape character areas identified as having lower inherent sensitivity characteristics (see White Consultants (2019) Stage 2 report, Table 7.1 Factors affecting the sensitivity of seascape character areas). White Consultants (2019) provides a sensitivity assessment for 15 SSZs around the Welsh coast. The sensitivity of a zone to offshore wind farms was then classified based on a series of criteria, which consider value, seascape susceptibility and visual susceptibility. Each zone was then given an overall sensitivity score, which was from a scale of low to high. The Mona Array Area is located within the Northern Wales and Irish Sea Round 4 offshore wind zone. The Round 4 offshore wind zone is located across areas of SSZ of high, high/medium, medium and medium/low sensitivity. The Mona Array Area itself lies partly within SSZ 2 and partly within SSZ 5, both of which have been defined as the lowest sensitivity to offshore wind development within the Round 4 offshore wind zone, with a category of medium/low sensitivity. Medium/low sensitivity seascapes are defined by White Consultants (2019) as: *Seascape and/or visual characteristics of the zone are resilient to change and/or its values are medium/low or low and it can accommodate the relevant type of development in many situations without significant character change or adverse effects. Thresholds for significant change are high.* Due to the proposed Mona Array Area being set back from the SSZ 2 boundary, and both SSZ 2 and SSZ 5 being defined beyond the National MCAs, beyond the 35 km 'theoretical limit to visibility' provided by the National Seascape Assessment for Wales (2015), their sensitivity to the type of development proposed is considered to belong to the lower category subject to specific project design. The horizontal and vertical scale of the coast influences the sensitivity of a seascape. The proposed Mona Array Area is located at a distance of 29 km, at its closest, from the coast and would not appear in framed views

Reference	Written Submission Comment	Applicant's response
		or across inner firths (as the consented Awel-y-Môr development does), where developments could take up more of the horizon, but, rather, it is located in open seas with no framing or scale references.
REP1-056.333	369. The Array is not located 'so as not to cause undue combined cumulative impact on existing landscape and visual receptors'. (Principle 9).	The Mona Array Area avoids significant combined cumulative effects with existing and consented developments. Due to the 13.5 km distance between the consented Awel-y-Môr offshore wind farm and the proposed Mona Array Area, the addition of Mona Array Area turbines would not densify the visible cluster of the existing and consented turbines in views from the north coast (including, for example at viewpoint 7 (Great Orme's Head - see APP-106), 34 (Little Orme 's Head, Llandudno - see APP109), 35 (Bryn Euryn Nature Reserve – see APP109 and 48(Llandudno Promenade – see APP 110)). The consented Awel-y-Môr development will double the viewing angle occupied by turbines in views at a distance of 11 km to 14 km from the north coast between Ormes/ Llandudno Bay and Dee Estuary. The Applicant notes NRW comment and intends to produce additional cumulative wirelines at a number of viewpoint locations. These will show both the Mona Array Area and the Awel-y-Môr array area. These will be provided at Deadline 3.
REP1-056.334	370. The Array is not located to avoid development 'within buffer distances of several separate designations' (see Principle 4 above) and this is highlighted as being a particularly important principle. (Principle 14).	The proposed Mona Array Area is located at a sufficient distant and is sited so as to comply with the following four design principles (12, 13, 14 and 15) of 'Locate development away from coastal landscape designations'. **Principle 12 – Avoid developments directly offshore from coastal designations** The proposed Mona Array Area is not directly offshore from coastal designations. It is located at a considerable distance and within medium/low seascape and visual sensitivity zone 2 'North East Wales Offshore' and seascape and visual sensitivity zone 5 'North Wales and Anglesey Outer Offshore' (White Consultants, 2019). **Principle 14 - Particularly avoid developments within buffer distances of several separate designations- Example 1 avoid locations offshore from islands.** **Principle 15. Particularly avoid developments within buffer distances of several separate designations- Example 2 avoid locations offshore from remote headlands/peninsulas**

Reference	Written Submission Comment	Applicant's response
		Principle 13 But avoid developments being visible in juxtaposition with sensitive views to headlands The proposed Mona Array Area is, at its closest, 30 km from the Anglesey AONB; 33.3 km from Puffin Island and 30 km from Great Orme's Head. The proposed Mona Array Area would appear distant behind the intervening Awel-y-Môr development in views related to the headland of Great Orme and Puffin Island. The turbines of the consented Awel-y-Môr offshore wind farm would appear as competing with the scale of the headlands and small islands in views, due to their proximate location. The proposed Mona Array Area would not appear in framed views or across inner firths, where developments could take up more of the visible horizon.
REP1-056.335	371. The Array is not located to 'avoid potential cumulative impacts by extending the width of arrays visible through extensions or additional wind farms'. (Principle 19).	The Mona Array Area avoids significant combined cumulative effects on seascape, landscape and visual receptors with existing and consented developments. As the Mona Array Area's southwestern corner is facing the northeastern coast of the Isle of Anglesey, at a distance of 29 km at its closest, only a limited number of turbines would be discernible in views from along the coast. Beyond a distance of 30 km, the decay effect will strongly restrict the appearance of the turbines. Distance remains the most influential factor, and the northeastern/northern half of the Mona Array Area is located with the clear visibility range of a coastal viewer. Due to the 13.5 km distance between the consented Awel-y-Môr offshore wind farm and the proposed Mona Array Area, the addition of Mona Array Area turbines would not densify the visible cluster of the existing and consented turbines in views from the north coast. The consented Awel-y-Môr development will double the viewing angle occupied by turbines in views at a distance of 11 km to 14 km from the north coast between Ormes/ Llandudno Bay and Dee Estuary.
REP1-056.336	1.3. Effects on the character and special qualities of the Isle of Anglesey National Landscape 372. The Applicant's comments miss the relevance of special qualities to certain locations and as a result dismiss the importance of impacts on these qualities. For example, in relation to impacts on 'expansive views' the Applicant states 'only those views from the northern coastline including the Irish Sea and the Mona Array Area would be affected'14. Comments such as this are dismissive of the	While the ZTV (Figure 1.1 of Volume 6, Annex 8.3: Visual baseline technical report – offshore development (APP-101) provides a useful indication from where visibility of the Mona Array Area might be experienced, there are a number of limitations that should be considered in the interpretation and use of the ZTV in the SLVIA (see paragraph A.1.2.1.7 of Volume 6, Annex 8.4: Seascape, landscape and visual resources impact assessment methodology (APP-104)). These limitations mean that, while the ZTV is useful as a starting point and aid to assessment, providing an indication of

Reference	Written Submission Comment	Applicant's response
	fact that a significant area of the coastline would be affected, as evidenced in the Applicant's ZTV and confirmed through observations on site.	where the Mona Array Area will be theoretically visible, it will tend to present a worst-case or over-estimate the actual visibility. The information drawn from the ZTV therefore requires verification by field survey observation and interpreted using professional judgement. Based on fieldwork observations, the Applicant has determined that the actual visibility of the proposed Mona Array Area would be closely related to, and contained within, the coastal edge of the Isle of Anglesey and north coast of Wales within the SLVIA study area (see Figure 1.1 of Volume 6, Annex 8.4: Seascape, landscape and visual resources impact assessment methodology (APP-104)), which at its closest location to the Mona Array Array, is at a distance of approximately 29 km. This means that the majority of the inland areas, including designated areas of the IoA NL and Eryri NP, alongside the coastal areas within the SLVIA study area remain outside of the actual visual influence of the Mona Array .
REP1-056.337	373. Similarly dismissive comments are made in relation to the impacts at Point Lynas, where the Applicant states 'visibility of the Mona Array Area is limited to the tip and eastern side of this promontory. Other expansive views along this promontory would be unaffected'15. We do not consider this visibility to be limited or of little importance. On the contrary, the fact the development would be visible from the end of this promontory is important and relevant. This is an obvious destination and viewing point, marked by the landmark Grade II listed lighthouse and accessible via the Coast Path. The fact the Array would be visible along the entire eastern side of the promontory which is Open Access Land and in itself is an attraction, is also significant. Point Lynas is part of the Heritage Coast and is therefore recognised as a 'stretch of outstanding, unspoilt coastline'. Qualities derived from its outstanding coastal scenery and unspoilt coastline, including a sense of wildness and tranquillity, are easily appreciated from Point Lynas, and would be adversely impacted by the proposed Array.	The distance of up to 30 km is considered as a realistic visibility range within which the offshore wind farm would be likely to be seen by anyone looking in the general direction of the proposed Mona Array Area, without any foreknowledge or actively seeking it out. As shown in the wirelines and photomontages for viewpoint 55: Trwyn Eilian (Point Lynas), Isle of Anglesey National Landscape (Volume 6, Annex 8.6: Seascape visualisations part 6 (APP-111)), the Mona Array Area, when seen, would occupy approximately 30 degrees of the horizontal field of view, which is a very narrow angle from an almost 360 degrees open view available from Point Lynas. It should be understood that the whole extent of Mona's Array Area will not be visible from Point Lynas, as shown on wireline view, but only the closest turbines on the edge of the array area facing the coast, with the rest fading away in correlation with the increase in distance. Even the outline of the closest turbines would be blurred over such a long distance. Figure 1.1 (sheet 1) in PDA-011 shows the areas of the Mona Array which are within a distance of 30 km and 35 km respectively from the coast, where the turbines would be most visible. As the Mona Array Area has a relatively narrow visibility within the vast scale open sea, the Applicant does not consider that it can affect the qualities of the coastal scenery, including a sense of wildness and tranquillity, from Point Lynas.

Reference	Written Submission Comment	Applicant's response
REP1-056.338	374. When discussing the impacts of the Array on peace and tranquillity within the IoA NL, the Applicant states impacts would not be significant due to the distance of the Array (which we have addressed elsewhere in our comments) and 'the influence of sea-based infrastructure and activities (offshore wind farms, shipping) and the presence and influence of infrastructure on land (such as the Wylfa Nuclear Power Station)'16. These comments are considered unhelpful as they are irrelevant to the majority of the IoA NL coastline affected by the Mona Array, for example: Wylfa is not visible from the majority of SLVIA viewpoints. Existing offshore wind farms are either not visible from or have a negligible impact on the majority of SLVIA viewpoints. Shipping is an inherently maritime and transient activity. It does not justify the type and degree of harm which would be caused by the Mona Array.	Please refer to the Applicant's response to REP-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. The Applicant highlights that reference to the influence of sea-based infrastructure and activities, and the influence of infrastructure on land in PDA-011 (paragraph 1.2.2.9 *et seq*.), was made in the context of peace and tranquillity across the IoA NL. It is agreed that these infrastructure and activities are not visible from all viewpoints within the IoA NL.
REP1-056.339	1.4. Effects on the settings of nationally designated landscapes 375. We disagree with assertions made by the Applicant and consider a number of these relate to why the Applicant has underestimated adverse effects on SDLs. For example, the Applicant asserts that 'the Mona Array, at distances of approximately 29 km and greater, and in 'open sea' would have almost no relationship to the coastal landscape and coastal landscape features'17. We disagree and advise the development would be a new and obvious focal point within views from coastal locations and would have a demonstrable relationship with the coastal landscape. For example:	The Applicant notes NRW response and refers to the Applicant's response set out in rows REP-056.340 to REP1-056.344.
REP1-056.340	376. At elevated viewpoints inland such as VP 1: Mynydd y Garn trig point (Figures 1.1 - 1.2) [APP-106] and VP 26: Yr Arwydd trig point, near Mynydd Bodafon (Figures 22.1 - 22.2) [APP-108] the distance within the horizontal field of view between the development and the coastline would appear small, and there would be a clear relationship between views of the coastline and the development. At both locations, the turbines would be seen in the context of an extensive tract of coastline which demonstrates coastal features such as the Traeth Dulas Estuary, and qualities for which the designation exists to conserve.	Please refer to the Applicant's response set out in rows REP-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance.

Reference	Written Submission Comment	Applicant's response
REP1-056.341	377. Closer to the coastline at viewpoints such as VP 2: Llanlleiana Head (Figures 2.1 - 2.2) [APP-106], VP 4: Bwrdd Arthur trig point (Figures 4.1 - 4.2) [APP-106], VP 24: Bull Bay, Amlwch (Figures 20.1 - 20.2) [APP-108], and VP 55: Trwyn Eilian (Point Lynas) (Figures 44.1 - 44.2) [APP-111], the turbines would be seen from and in the context of the coastal edge. At these locations the relationship between the coastal landscape and the sea is immediate and strong. The turbines would harm the scenic and perceptual qualities of the coastal landscape in these areas being an obvious detractor and focal point in views offshore.	Please refer to the Applicant's response set out in rows REP-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. The turbines within the Mona Array Area will not form a focal point in views in the context of such a vast open coastal edge. The eye is drawn along the coastal edge and the Mona Array Area will not intervene in views of these distinctive coastal landforms. Effects attributable to the development are a result of introducing a new element into the view (where turbines are not currently present) rather than due to its scale. It should be noted that the viewpoints' assessment is based on the locality of specific viewpoints within a designated landscape, however the Mona SLVIA considered effects within the entire designated areas, including parts which are outside of the zone of the visual influence of the proposed development.
REP1-056.342	378. In relation to the settings of nationally designated landscapes the Applicant states 'When viewed from the coast the overriding influences on the intervening seascape character are the existing numerous offshore wind turbines and the large commercial shipping vessels that use these waters'18. We disagree and advise these comments do not accurately reflect the character of the seascape setting to the affected parts of the IoA NL, where the overriding influence on the intervening seascape is the sea and an absence of any fixed development, as illustrated in the Applicant's baseline viewpoint photographs from VPs 1-4, VPs 24-28, and VP 55 [APP 102 & APP 103].	The Applicant notes that the consented Awel-y-Môr project, which was considered within the SVIA cumulative assessment within Tier 1 (consented and existing offshore wind farms) will be seen as a prominent development in relation to the coast from viewpoint 4 (Bwrdd Arthur trig point, Isle of Anglesey National Landscape), and viewpoints 24 to 28 (Bull Bay, Moelfre Headland, Yr Arwydd trip point, Benllech and Penmon Point). The proposed Mona Array Area would appear distant, barely discernible, whereas the turbines of consented Awel-y-Môr development would appear as competing with the scale of the headlands and small islands in views, due to their location in the proximity to these coastal features.
REP1-056.343	379. Regarding the influence of 'commercial shipping vessels' on the visual amenity of views and seascape character, we advise such vessels are typically seen low on the horizon and are either temporarily static (awaiting the pilot) or are moving slowly. Whereas the large scale and height of the turbines, their fixed position, and rotation of their blades means they are a more obvious detractor, and one which is not an inherently maritime feature.	Please refer to the Applicant's response set out in rows REP-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. The Applicant also notes that at a distance of 29 km from the IoA NL, it would be difficult to distinguish the blade movement of turbines. The blades are the slimmest part of the turbine and if the outline of the turbine towers loses clarity over distance it would then be difficult to detect blade movements. In terms of perceptual issues, as an example, the acuity of the eye varies. However, it would require a conscious effort to focus on the turbines in order to detect this movement. The movement of blades in itself is not considered as something which attracts attention at this distance.

Reference	Written Submission Comment	Applicant's response
REP1-056.344	380. The Applicant concludes 'the Applicant's position is that the Mona Offshore Wind Project would have little if any effect on the setting of the Isle of Anglesey NL, the Eryri NP and the Clwydian Range and Dee Valley NL'19. We disagree and advise that the development would result in significant harm to the setting of the IoA NL, because of: The importance of the seascape setting to the character and qualities of the IoA NL; The prominence of the Mona Array within that setting; Its contrast with the inherent qualities of that setting; and, The importance of those qualities to the experience of the IoA NL.	As outlined in Volume 2, Chapter 8: Seascape and visual resources (APP-060), there are no significant effects resulting from the development of the Mona Array Area, on the IoA NL. The Mona Array development will not appear in association with the landform of the coastal edge or coastal features, as it will appear as a barely discernible distant feature on the open seascape. The Mona Array will not appear in association with any coastal features, for example, it will not decrease the apparent vertical scale of the headland or small islands, instead it is seen within a vast open sea. The Mona Array will not conflict in scale with an intricate coastline made up of smaller scale seascapes and offshore islands. Therefore, it cannot be construed as a prominent feature. The Applicant also refers to PDA-011, paragraph 1.2.2.24 *et seq*.
REP1-056.345	1.5. Effects of the Mona Offshore Wind Project on visual receptors using the Wales Coast Path 381. SLVIA viewpoints on the Wales Coast Path within the IoA NL are: Viewpoint 2: Llanlleiana Head (APP-106) Viewpoint 24: Bull Bay, Amlwch (APP-108) Viewpoint 25: Moelfre Headland (APP-108) Viewpoint 28: Penmon Point (APP-108) Viewpoint 55: Trwyn Eilian (Point Lynas) (APP-111)	The Applicant notes NRW's response. It should be noted that the viewpoints' assessment is based on the locality of specific viewpoints within a designated landscape, however the Mona SLVIA considered effects within the entire designated areas, including parts which are outside of the zone of the visual influence of the proposed development.
REP1-056.346	382. The Applicant concludes 'Although it is acknowledged that adverse visual effects would be experienced by people at these viewpoints and by these receptor groups the Applicant found that no significant effects on people's views and visual amenity would be experienced, primarily due to distance of the Mona Array from the land'20 (our emphasis). For the reasons outlined elsewhere in our advice, we disagree. The Applicant considers that the distance is significant and sufficient to ensure there would be no significant adverse impacts. We advise that when considering the size of the proposed turbines (364m blade tip height), the distance offshore is not significant, nor is it sufficient to avoid: The turbines being an obvious feature within views. Impacting on identified qualities sought to be protected by the NL designation (e.g. scenic qualities and perceptual qualities such as a sense of wildness and	Please refer to the Applicant's response set out under REP-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. No significant visual effects from the development of the Mona Offshore Wind Farm would be experienced by people using either the Wales Coast Path, or Offa's Dyke Path National Trail. Views from the Wales Coast Path will be affected by the addition of Awel-y-Môr which is located 11 km from the Great Orme's Head and 19 km from Penmon Point. Almost the entire length of the Wales Coast Path falls within the Mona Array Area ZTV, along the eastern coast of the IoA and the northern coast of Wales. The Wales Coast Path also falls within the ZTV of the consented

Reference	Written Submission Comment	Applicant's response
	tranquillity). Undermining the experience of those qualities for visitors to the NL.	Awel-y-Môr development. As the consented Awel-y-Môr development is almost three times closer to the coast than the Mona Array Area, Awel-y-Môr will inevitably form the focus in views from the Wales Coast Path. The consented Awel-y-Môr will double the viewing angle occupied by turbines in views at a distance of 11 km to 14 km from the north coast between Ormes/ Llandudno Bay and Dee Estuary, and will dominate the views from the Wales Coast Path due to its close proximity to the coastal features such as small islands and headlands. The proposed Mona Array Area would be subsidiary and a not clearly perceivable distant feature in comparison with the Awel-y-Môr development. In order to have unaffected coastal views from the Wales Coast Path, people would have to travel 30 km from the consented Awel-y-Môr. In relation to the Mona Array Area, people are already at a distance where visibility of the type of development proposed is strongly affected by atmospheric conditions. Figure 1.1 to 1.3 in PDA-011 demonstrate comparative visibility ranges for Mona and Awel-y-Môr from the Wales Coast Path. This illustrates that the Mona Array Area will be seen at its closest to the coast of the IoA, within a visibility range of up to 30 km at Point Lynas. Beyond Point Lynas the Mona Array Area falls beyond a 30 km visibility range, where visibility of the type of development proposed is strongly affected by atmospheric conditions.
REP1-056.347	1.6. Combined and sequential cumulative effects experienced by users of the Wales Coast Path 383. Although the heading of this section refers to sequential cumulative effects, these effects are not addressed. In relation to the combined effect at different viewpoints, the Applicant states 'The combined effect attributable to the addition of the Mona Array at these distances, given the context and prevailing atmospheric conditions, from the nationally designated landscapes would not noticeably increase any effects already caused by Awel y Môr, which retains its prominent position in relation to the national landscapes…'.21 We disagree and advise that at viewpoints such as VP 28: Penmon Point, turbines in the Mona Array and those in Awel-y-Môr would be seen in the same views, and appear close together, with each extending the horizontal field of view affected by the other. We note the SLVIA which supported the Awel-y-Môr application concluded that turbines within Awel-y-Môr would have a Major-Moderate adverse (significant) visual effect at this location22.	
REP1-056.348	384. Elsewhere on Anglesey, for example at VP 3: Mynydd Eilian (Figure 47), the turbines within the separate developments would appear similar in size, being significantly larger than any other development in view, and the gap between the two developments would appear small. The Mona Array would occupy a larger field of view compared with Awel-y-Môr and in combination large scale offshore wind turbine development would be seen across a substantial horizontal field of view in a location where offshore views are currently unaffected by development; with Walney too far to significantly affect views. We advise that at locations such as VPs 28 and 3, the combined cumulative effect would be greater than the effect of either the Mona Array or Awel-y-Môr in isolation and would be significant.	From viewpoint 3 (Mynydd Eilian) both the Mona Array Area and the consented Awel-y-Môr array will appear at almost the same distance, which is slightly beyond 30 km, and both will blend in with the vast sea horizon. Effects attributable to the Mona Array Area and Awel-y-Môr offshore wind farm at the viewpoint locations which overlap with the Mona SLVIA viewpoints 55 (Point Lynas) and 3 (Mynydd Eilian) were considered not significant, in the SLVIAs of both developments (APP-060 and RWE, 2022 – Volume 2, Chapter 10: Seascape, Landscape and Visual Impact Assessment). An almost 45 degrees gap or 13.7 km distance in between developments is considered as a separation of sufficiently wide distance. Beyond 30 km distance a decay effect takes place and turbines will fade away. Also, the main focus of these views is not the sea but the distinctive coastal landform and the distant profile of the Eryri NP.

Reference	Written Submission Comment	Applicant's response
		The NRW statement that the cumulative effect resulting from Mona and Awel-y-Môr would be greater than the effect of the Mona Array in isolation, is correct. However, in views such as viewpoint 28 (Penmon Point, IoA LP), the consented Awel-y-Môr development will be 16 km closer to the coast, where the turbines of the consented Awel y Môr will appear as competing with the scale of the headlands and small islands in views. These effects would not be attributable to the Mona Array Area due to the distance and its location within the open sea.
REP1-056.349	1.7. Relevant Representation – paragraphs 3.1.1.7 to 3.1.1.9 385. It is clear from the Applicant's Response23 they do not consider it necessary to make any changes to the proposed development because their SLVIA has not identified any significant effects, other than a 'potentially significant cumulative effects … for the special quality entitled tranquillity and solitude – peaceful areas in Eryri National Park'. We also assume it is the Applicant's position that, for the same reasons, they do not consider it necessary to provide any offsetting/enhancement measures.	The Applicant notes NRW's response.
REP1-056.350	386. A fundamental difference therefore between our position and the Applicant's position, is we consider the Mona Array would cause significant adverse effects on the IoA NL and the ENP whereas the Applicant does not. If the Applicant cannot mitigate these effects, they should provide offsetting/enhancement measures. Opportunities to enhance designated landscapes are encouraged by the WNMP but no proposals for enhancement are included. Enhancements represent compensation and/or offsetting and not mitigation for adverse effects, as any enhancements would not be directly related to the impacts. Notwithstanding this, if DCO consent is to be granted, we consider that a proportionate enhancement scheme for the IoA NL and ENP should be provided to compensate for the adverse effects of the Mona Array on these nationally important landscapes.	The effects individually attributable to the Mona Array Area would not affect the special qualities of designated landscapes or visual amenity (as outlined in the Applicant's response to REP1-056.344. The Applicant therefore maintains that no offsetting or enhancement measures are required.
REP1-056.351	1.8. Isle of Anglesey National Landscape - IoA NL – Effects on Views and Visual Amenity 387. At its closest point the Mona Array is located approximately 29km northeast of the IoA NL (Trwyn Eilian (Point Lynas)).	The Applicant notes NRW's response.

Reference	Written Submission Comment	Applicant's response
	Comments below relate to the Mona Array as the proposed substation would not be visible from the IoA NL.	
REP1-056.352	388. The Crown Estate lease for the Mona Array is 60 years. Whilst the 'design life of the Mona Offshore Wind Project is likely to be 35 years'24 repowering/replacing the turbines within the 60-year lease period is reasonably likely. The impacts discussed in our comments are therefore long term.	As noted, by NRW, the turbines within the Mona Offshore Wind Project have a 35 year operational life, and this has formed the basis of the SLVIA. Any re-powering of the Mona Array Area would be subject to additional consents and licences, and associated assessment.
REP1-056.353	389. The SLVIA includes the following representative viewpoints (VP) within the IoA NL: • VP 1: Mynydd y Garn trig point (Figures 1.1 - 1.2) [APP-106] • VP 2: Llanlleiana Head (Figures 2.1 - 2.2) [APP-106] • VP 3: Mynydd Eilian (Figures 3.1 - 3.2 and Figure 47) [APP-106 and APP-112] • VP 4: Bwrdd Arthur trig point (Figures 4.1 - 4.2) [APP-106] • VP 24: Bull Bay, Amlwch (Figures 20.1 - 20.2) [APP-108] • VP 25: Moelfre Headland (Figures 21.1 - 21.2) [APP-108] • VP 26: Yr Arwydd trig point, near Mynydd Bodafon (Figures 22.1 - 22.2) [APP-108] • VP 28: Penmon Point (Figures 24.1 - 24.2 and Figure 56) [APP-108 and APP-112] • VP 55: Trwyn Eilian (Point Lynas) (Figures 44.1 - 44.2) [APP-111] • VP 57: Trwyn Cemlyn (Figures 46.1 - 46.2) [APP-111]	The Applicant notes NRW's response. It should be noted that the viewpoints' assessment is based on the locality of specific viewpoints within a designated landscape, however the Mona SLVIA considered effects within the entire designated areas, including parts which are outside of the zone of the visual influence of the proposed development.
REP1-056.354	390. Visual receptors (people who will be affected by changes to their views and visual amenity) at all of the above viewpoints are assessed within the SLVIA as having high sensitivity to the proposed development. We advise people at these locations have the highest level of sensitivity, which is 'very high' within the SLVIA. Receptors at these locations will be particularly interested in their surroundings, being on the Isle of Anglesey Coastal Path and/or at a particular viewpoint such as Trwyn Eilian (Point Lynas). All are within an area designated for its natural beauty.	Effects on views and visual amenity of people within the IoA NL and Eryri NP have been assessed from a range of representative viewpoint locations as documented in Volume 2, Chapter 8: Seascape and visual resources (APP-060). The effects are in the range of negligible to moderate adverse, all of which have been determined as not significant. Please refer to the Applicant's response set out under REP-056.322 to REP1-056.324 regarding matters associated with magnitude of impact. The SLVIA uses methodology derived from GLVIA3 (Landscape Institute, 2013). The Applicant notes that GLVIA3 does not promote the use of matrixes, and the assessment of significance should be reasoned through professional judgement, and not exactly how the criteria is met in the matrix. The SLVIA criteria for sensitivity and magnitude are adequate and widely used. They are based on recognised guidance documents and not
REP1-056.355	391. For example, VP 2 Llanlleiana Head is located: On a locally and nationally promoted route (The Isle of Anglesey Coast Path & Wales Coast Path); Within an area of Open Access Land; Within the Dinas Gynfor Hillfort Scheduled Monument; Within an area of	

Reference	Written Submission Comment	Applicant's response
	Heritage Coast (stretches of outstanding, unspoilt coastline set up to protect coastlines from insensitive developments and to encourage and help the public to enjoy, understand and appreciate these areas.); Within an Area of Outstanding Natural Beauty / National Landscape (designated for the purpose of conserving and enhancing the natural beauty of the area); and, The current view, as described in the SLVIA is an 'attractive seascape view [which] is wild and natural in character'25.	specifically developed for this SLVIA. Sensitivity is a combined judgement of value which is attached to the view and susceptibility to change. The Mona SLVIA applied very high sensitivity to visual receptors such as national trails within nationally designated landscapes. For the purposes of the Mona SLVIA 'moderate' effects can be either significant or not significant, depending on the context of the resource or receptor. In most cases an effect of moderate is most likely not to be significant, in accordance with GLVIA3 (Landscape Institute, 2013), DTI (2005) and White Consultants (2020). In the views from this coastal large-scale landscape, the Mona Array Area, located within the vast scale of the seascape, at a long distance from the receptor and occupying a narrow angle of the wide open panorama, most of its turbines fade away against the horizon, not conflicting in terms of scale with any of the coastal features. Furthermore, the Mona Array Area is located on the open sea therefore the eye is typically drawn along the coastal edge and to the coastal features, where an expansive sea horizon also forms part of the view. The Mona Array Area will not appear as a clearly visible, well defined new element in coastal views. It will not cause a distinct change to the current baseline context.
REP1-056.356	392. People at this location – and on the preceding sections of the coast path – will be very interested in views of their surroundings, and in particular views of the coast and sea, which are an important contribution to their experience of this particular National Landscape. Despite these factors, the SLVIA downgrades the sensitivity of people at this location, assessing it as high rather than very high. Following concerns raised in our comments at PEIR, it remains unclear why the SLVIA has downgraded sensitivity on receptors such as those at VP 2.	
REP1-056.357	393. The underestimation of sensitivity within the SLVIA has implications for the conclusions of effect. The SLVIA considers that effects with 'a significance level of substantial or major' are deemed significant in EIA terms26. According to the SLVIA methodology27, an effect will considered to be substantial or major, and therefore be deemed significant, if there is: A large (the largest category) magnitude of impact on a receptor with a high or very high sensitivity, or A medium magnitude of impact on a receptor with a very high sensitivity.	
REP1-056.358	394. Therefore, if it is accepted that receptors at e.g. VP 2 Llanlleiana Head have high rather than very high sensitivity, then according to the SLVIA methodology the only way in which those receptors would experience a significant effect is if the magnitude of change were 'large', which is defined in the SLVIA as a: 'Total loss, or/very substantial loss or addition of key elements/features/patterns of the baseline (i.e. pre-development seascape/landscape) and/or introduction of dominant, uncharacteristic elements compared to the attributes of the	

Reference	Written Submission Comment	Applicant's response
	receiving seascape/landscape'. We advise this threshold is too high and it has distorted the conclusions of the SLVIA.	
REP1-056.359	395. Furthermore, we question the threshold of significance (set in the SLVIA as either major or substantial) when the SLVIA defines a moderate effect as: 'Where proposed changes would be demonstrably out of scale or at variance with the character of an area'. 'Where proposed changes to views would be demonstrably out of scale or at variance with the existing view'.	
REP1-056.360	396. These changes should be considered potentially significant, at least, when they occur in relation to a National Park or National Landscape. That is why, in most SLVIAs, moderate is considered to be potentially significant, and is often considered to be significant when the receptor relates to a designated landscape.	
REP1-056.361	397. At all of the viewpoints above, the SLVIA concludes that during the operational phase the magnitude of change would either be negligible or small. This results in a 'negligible to minor adverse' effect on receptors at VP 1: Mynydd y Garn trig point and VP 57: Trwyn Cemlyn, and a 'minor to moderate' adverse effect on receptors at all other viewpoints listed above.	The Applicant notes NRW's response.
REP1-056.362	398. We disagree with these conclusions and consider that the magnitude of change at all viewpoints is expected to be at least small and, in some places, medium. We advise that for offshore turbines with a blade tip height of 364m, an average low magnitude of change is typically expected to occur up to approximately 48.4km distance28. All SLVIA viewpoints above are within this distance. Combined with a high sensitivity receptor, a small magnitude of change is expected to result in an effect of 'moderate' significance, which we advise is potentially significant. Furthermore, a medium magnitude of change is typically expected to occur up to approximately 36.4km distance29. The following SLVIA viewpoints are within this distance30: VP 2: Llanlleiana Head (33.8km) VP 3: Mynydd Eilian (31km) VP 24: Bull Bay, Amlwch (31.9km) VP 25: Moelfre Headland (33.2km) VP 26: Yr Arwydd trig point, near Mynydd Bodafon (36.4km) VP 28: Penmon Point (35.2km) VP 55: Trwyn Eilian (Point Lynas) (29.1km) Other	Please refer to the Applicant's response set out in rows REP-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect.

Reference	Written Submission Comment	Applicant's response
	viewpoints such as VP 4 Bwrdd Arthur trig point (36.6km) are also close to this distance.	
REP1-056.363	399. We advise a medium magnitude of change is likely to result in an effect of 'major-moderate' significance on high sensitivity receptors within a National Landscape. Research and guidance indicate that major-moderate is classified as significant in the vast majority of SLVIAs.	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect.
REP1-056.364	400. Whilst the above is intended to be used as a guide, we advise that in the case of this application, the guidance is considered to be accurate. At the locations above (VPs 2-4, 24-26, 28, 55) the magnitude of change is expected to be medium and the effect of the Mona Array would be moderate/major adverse and, in our opinion, significant.	Please refer to the Applicant's response set out in rows REP1-056.322 to REP1-056.324 and REP1-056.342 regarding matters associated with magnitude of impact and distance. Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding masters associated with the significance of the effect. From viewpoint 3 (Mynydd Eillan) both the Mona Array Area and the consented Awel-y-Môr development will appear at almost the same distance, which is slightly beyond 30 km, and both will blend in with the vast sea horizon. An almost 45 degrees gap or 13.7 km distance in between developments is considered as a sufficiently wide separation. Beyond this distance a decay effect takes place and turbines will fade away. Also, the main focus of these views is not the sea but the distinctive coastal landform and the distant profile of Eryri NP. The consented Awel-y-Môr, will be seen as a prominent development in relation to the coast from viewpoint 4 (Bwrdd Arthur trig point, Isle of Anglesey National Landscape), and viewpoints 24 to 28 (Bull Bay, Moelfre Headland, Yr Arwydd trig point, Benllech and Penmon Point). The proposed Mona Array Area would appear distant, barely discernible, whereas the turbines of the consented Awel-y-Môr development would appear as competing with the scale of the headlands and small islands in views, due to their location in the proximity to these coastal features.
REP1-056.365	401. At the more distant viewpoints within the IoA NL (VP 1: Mynydd y Garn trig point (42.4km) and VP 57: Trwyn Cemlyn (39km)) we consider the magnitude of change would be at least small and the overall effect would be moderate adverse and, in our opinion, potentially significant.	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect.

Reference	Written Submission Comment	Applicant's response
REP1-056.366	402. In comments on the PEIR, we raised concerns about the omission from the SLVIA of local landscape/seascape receptors. The final SLVIA continues to use National Landscape and Seascape Character Areas as receptors and therefore provides only a high-level assessment of landscape/seascape effects. Whilst studies such as the Anglesey Landscape Strategy, 2011 and Anglesey Seascape Character Assessment, 201331, are referenced in the SLVIA, they are not receptors and it is not clear how – if at all - the review of these documents has informed an understanding of the various character areas along the Anglesey Coast, their characteristics and special qualities, and the impacts on these. Problems arising from omitting an assessment against local baseline studies include: Key characteristics and qualities within those areas and the impact on these are unreported. Judgements on the geographical extent of impacts distort conclusions because they are based on the geographical extent of a national character area, which covers a substantial area drawn at a national scale.	Due to distance from the coast, the Mona Array lies outside of the Regional Seascape Units (CCW 2009) and the Welsh Marine Character Areas (Land Use Consultants for Natural Resources Wales, 2015). It is only the Seascape Sensitivity Zones (White Consultants, 2019) that provide coverage of the whole of Welsh territorial waters. For the seaward element of seascape character this was the level considered within the SLVIA. This avoided any 'double counting' and provides a comparable assessment of all the different areas of the sea. This approach is recommended by CCW (2009), which explains that the larger the study area the greater the number of different regional seascape units lie within it. This then becomes a practical issue when assessing seascape effects. CCW recommends working with the fewer larger seascape units at the national scale (CCW, 2009; Appendix 1, page 255). Due to the distance from the coast and the indirect effects on landscape character, the landward part of the SLVIA is considered the most sensitive level of landscape characterisation (i.e. the special qualities of the IoA NL, Eryri NP and the Clwydian Range and Dee Valley NL). This avoided any 'double counting' that could have occurred if other levels of character areas of lesser sensitivity were assessed, which due to distance do not have the potential to experience significant effects.
REP1-056.367	403. The SLVIA assesses the sensitivity of National Landscape Character Area (NLCA) 1 Anglesey Coast as medium to high. The magnitude of change during operation is assessed as 'negligible to small' and the overall effect is reported as 'minor adverse at most'. The SLVIA justifies the negligible/small magnitude of change by stating that except for parts of the north coastline of NCLA 01, 'The remainder of this coastal landscape of this NLCA will be scarcely affected'32. We advise that whilst geographical extent is relevant, it is only one of several considerations with others including the 'size or scale' of the change to the character and qualities within those parts of the landscape that would be affected. Placing great weight on the proportion / geographical extent of impacts on a receptor, when that receptor is a National Landscape Character Area (or designated landscape), will inevitably lead to the effects being described as minor. Few if any scheme would have a significant effect for the majority of a National Landscape Character Area	The local landscape character areas have not been considered in relation to the Mona Array Area, given the distance from shore. In the interests of proportionality, a decision was taken to only use the nationally designated landscapes and national landscape character areas. LANDMAP Aspect Areas have been used for the onshore elements of the project.

Reference	Written Submission Comment	Applicant's response
	given these typically relate to substantial geographical areas, identified at a national scale.	
REP1-056.368	404. Notwithstanding the above, we advise the geographical extent of impacts along the Anglesey coastline is large. This is evident in the zone of theoretical visibility (ZTV) analysis, which shows visibility across a large geographical area (Figure A.4 (APP-060)) and is evident from the number and wide distribution of viewpoints along the coast.	Please refer to the Applicant's response set out in rows REP1-056.336 regarding matters associated with the use of the ZTV within the SLVIA.
REP1-056.369	405. The relationship between land and sea is integral to the character of NCLA 01, and as described in the NCLA profile 'The area's strongest identity comes from the varying expression of the relationship of the sea to the land..'33. This relationship, and the importance of coastal views, are described in greater detail within the Anglesey Seascape Character Assessment, 2013, which divides the north coast of Anglesey into 5 unique Seascape Character Areas (SCAs). These areas consist of both terrestrial and marine parts, and are described as 'geographically-distinct areas with a unique sense of place'34. The 5 SCAs are: SCA 5: Penmon SCA 6: Red Wharf Bay to Moelfre SCA 7: Dulas Bay SCA 8: Amlwch and Cemaes SCA 9: Cemlyn Bay	The Applicant notes NRW's response.
REP1-056.370	406. The SCA descriptions provide additional information to the NCLA description, and highlight specific characteristics, qualities, and sensitivities which are relevant to the assessment of the Mona Array. For example:	Please refer to the Applicant's response set out in rows REP1-056.366 regarding matters associated with National Landscape and Seascape Character Areas in the SLVIA.
REP1-056.371	407. SCA 5: Penmon – the description highlights valued aspects such as the Grade II* listed Trwyn Du Lighthouse, and the area's remote and wild qualities. It specifically highlights 'panoramic, open views over the sea' and where these contrast with 'the enclosed feel of the land'. Long views seaward to the north and the lack of existing development are highlighted as inherent sensitivities. These aspects – as they relate to the coast at Penmon - are not specifically highlighted in the NCLA description. Yet the proposed Array would adversely impact on these aspects. The photomontage from VP 28: Penmon Point (Figures 24.1 - 24.2 and Figure 56 (APP-106) illustrates how the Mona Array would erode the area's	Please refer to the Applicant's response set out in rows REP1-056.366 regarding matters associated with National Landscape and Seascape Character Areas in the SLVIA. The location of the Mona Array Area adheres to following good design principles, which are set out in the Stage 2 report of Seascape and visual sensitivity to offshore wind farms in Wales (White Consultants, 2019) which replicates the Guidance on the Assessment of the Impact of Offshore Wind Farms: Seascape and Visual Impact Report (DTI, 2005). These have sought to avoid or minimise adverse effects as stated in Policy SOC_07 Seascapes of the Welsh National Marine Plan. These are:

Reference	Written Submission Comment	Applicant's response
	wild qualities by introducing a large development into an area of the sea which is currently undeveloped. This change would be seen directly behind the Lighthouse at a location where views of the Lighthouse and panoramic views over the sea are particularly valued by visitors.	• located far away from the coastline/ landscape designations • located in lower sensitivity seascapes • avoids stacking effect • set back from the existing/ consented offshore wind farms • avoids developments being visible in juxtaposition with sensitive views to headlands • avoids providing scale reference in views with small islands or coastal landform/ features • avoids filling framed views in between headlands. The Applicant does not agree with NRW's statement that the Mona Array Area would erode the area's wild qualities in views from Penmon Point. The consented Awel-y-Môr development is 16 km closer to the coast than the Mona Array Area. The proposed Mona Array Area would therefore appear distant behind the intervening Awel-y-Môr offshore wind farm. The turbines of the consented Awel-y-Môr will appear in association with Puffin Island, the prominent landmark in the view. The additional effects attributable to the Mona Array Area, due to its distance and its location within the open sea, will not result in any significant effects. The proposed Mona Array Area would also appear distant behind the intervening Awel-y-Môr offshore wind farm in views related to the headland of Great Orme and Penmon Point. The turbines of the consented Awel-y-Môr offshore wind farm would appear as competing in scale with the headlands and small islands in views, due to their location in the proximity of coastal features. The consented Awel-y-Môr is located at such close proximity to the coast that the cumulative effect attributable to the addition of the Mona Array Area at a distance of 29 km from the coast would not increase any effects already caused by Awel-y-Môr.
REP1-056.372	408. SCA 7: Dulas Bay – the description highlights the importance of the Traeth Dulas Estuary, which is not highlighted in the NLCA description. The Applicant's photomontage from Viewpoint 26: Yr Arwydd trig point (Figures 22.1 - 22.2) (APP-108) illustrates how the Mona Array would adversely impact upon the character of views towards the Estuary by introducing a large-scale detractor	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect. It should be noted that the Awel-y-Môr offshore wind farm, although not appearing on the baseline photography, has been consented and therefore will be seen as a prominent development in relation to the coast from

Reference	Written Submission Comment	Applicant's response
	within the visual setting of the Estuary, with similar impacts also expected to be experienced from locations at/closer to the Estuary itself.	viewpoint 4 (Bwrdd Arthur), and viewpoints 24 to28 (Bull Bay, Moelfre Headland, Yr Arwydd trip point, Benllech and Penmon Point). The additional effects attributable to the Mona Array Area due to the distance and its location within the open sea will not result in any significant effects. In views such as viewpoint 28 (Penmon Point), the consented Awel-y-Môr development is 16 km closer to the coast, where the turbines of the consented Awel-y-Môr will appear as competing with the scale of the headlands and small islands in views. These effects would not be attributable to the Mona Array Area due to the distance and its location within the open sea.
REP1-056.373	409. SCA 8: Amlwch and Cemaes – the description highlights valued aspects including the open views seawards to the north, the wild qualities of the rocky coast and seascape, and the sense of remoteness and wildness particularly in areas of coastal heath. The Applicant's photomontage from VP 2: Llanlleiana Head (Figures 2.1 - 2.2) (APP-106) is taken from an area of coastal heath, and in this area and the adjoining sections of the coast path, the coast has strong perceptual qualities of wildness, remoteness and tranquillity. These qualities are in part due to the emptiness of the seascape setting. The Array would introduce an obvious large-scale development within that setting, eroding the aforementioned qualities.	Please refer to the Applicant's response set out in rows REP1-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. The turbines of Mona Array Area will not form a focal point in views in the context of such a vast open coastal edge. The eye is drawn along the coastal edge and the Mona Array Area will not intervene in views of these distinctive coastal landforms. Effects attributable to the development would be pronounced due to its appearance as a new, although distant, element within the view, rather than due to its scale.
REP1-056.374	410. The description of SCA 8 also draws attention to the Grade II listed Lighthouse, which sits at the end of Trwyn Eilian (Point Lynas). This is a popular location with visitors seeking coastal views and the sense of wildness and exposure on the promontory. At this location the offshore horizon is empty and panoramic views across the open sea strengthen the sense of exposure and wildness and underpin the relationship of this location to the sea. The Applicant's photomontage from VP 55: Trwyn Eilian (Point Lynas) (Figures 44.1 - 44.2) (APP-111) shows the field of view impacted would be wide, and the development would detract from the scenic and perceptual qualities at this location.	Please refer to the Applicant's response set out in rows REP1-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. The turbines of Mona Array Area will not form a focal point in views in the context of such a vast open coastal edge. The eye is drawn along the coastal edge and the Mona Array Area will not intervene in views of these distinctive coastal landforms. Effects attributable to the development would be pronounced due to its appearance as a new, although distant, element within the view, rather than due to its scale.

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REP1-056.375	411. Seascape character along the north coast of Anglesey varies, and is most sensitive within those areas which correspond with the IoA NL designation, and where views of the sea and/or coastal features contribute to the area's unique sense of place. The magnitude of change to scenic and perceptual characteristics within each SCA will vary, but will be greatest where the Array would adversely impact upon valued aspects such as those highlighted above. At such locations, we consider the magnitude of change to characteristics of the SCAs would be medium and the effect up to moderate/major adverse and significant. For the avoidance of doubt, we consider impacts on scenic and perceptual characteristics of the IoA NL coastline would extend to a greater number of locations than the examples given above.	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect.
REP1-056.376	1.10. IoA NL – Special Qualities 412. The SLVIA assesses the impact of the Array on two of the IoA NL's special qualities: 'expansive views' and 'peace and tranquillity'. The first special quality should read 'expansive views/seascapes'35. The SLVIA considers that both special qualities are of 'high value'. We advise that special qualities of a nationally designated landscape should be afforded the highest value within an SLVIA, which in this case is very high. The overall sensitivity of these qualities is assessed within the SLVIA as high.	The Applicant considers that the methodology detailed in APP-104 is clear, transparent and robust, for the reasons detailed in responses above. The Applicant confirms that it has applied the methodology correctly. The Applicant has assessed the special qualities individually in APP-105. The special qualities are part of the character of the nationally designated landscapes which is assessed as high. This is the correct approach, as the existing views out to sea are not of an empty sea, but have detracting factors as described in White Consultants (2019) in both the intervening, inshore SSZs and the offshore and outer offshore SSZs that the Mona Array lies within, as well as described in the responses above.
REP1-056.377	413. The SLVIA considers the Array would result in a 'negligible to small' magnitude of change to these qualities, resulting in a minor to moderate adverse effect. The magnitude of change judgement is reasoned 'Due to the distance to the Mona Array Area, and the geographic extent of the effects, being largely confined primarily to the northeast coastline of the NL overlooking the Irish Sea'.36	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effects on the special qualities of the NL.
REP1-056.378	414. We do not agree that the distance is significant when considering the size of the proposed turbines (364m) nor that the geographic extent is insignificant, as the Array would impact on key viewpoints along the entire northern coastline of the IoA NL. Sea views are the key focus in the predominantly coastal AONB, many of which are currently empty and unimpeded by development. The	The Applicant disagrees with NRW's statement, which apart from any other factors, disregards the effect of distance in marine conditions. White Consultants (2020) also considers that distance is a mitigating factor (although the Applicant does not agree with the thresholds set in this document, repeated in OESEA4 (DBEIS, 2022)).

Reference	Written Submission Comment	Applicant's response
	scale and nature of the Array would make it noticeable and would focus attention on it, detracting from the area's expansive seascape views and sense of peace and tranquillity. The effects on views, and scenic and perceptual aspects of the seascape are reported above, and these relate directly to the identified special qualities of the IoA NL. For the reasons set out above, we consider these qualities would be harmed by the proposed Array.	OESEA4 (DBEIS, 2022), at section 5.8, sets out clearly that other considerations should be taken into account in the assessment. CCW (2009) also sets out the effects of distance on views in Appendix 1c (pages 252 to 254): Limit of visual significance. Due to the distance of the Mona Array Area from the coast, only the closest turbines would be perceivable. The shape and layout of the Mona Array Area would determine that the extent of the Mona Array Area boundary facing the coast would occupy only a limited part of the available views. As the Mona Array Area's southwestern corner is facing the northeastern coast of the Isle of Anglesey, at a distance of 29 km at its closest, only a limited number of turbines would be discernible in views from along the coast. Beyond a distance of 30 km the decay effect will strongly restrict the appearance of the turbines. Distance remains the most influential factor, and the northeastern/northern half of the Mona Array Area is located out of the clear visibility range of a coastal viewer. The offshore and outer offshore SSZs that the Mona Array Area is located, approximately 29 km from the coast, can accommodate the Mona Array Area without significant effects.
REP1-056.379	415. Although the special qualities of 'Islands around Anglesey' and the 'Public rights of way network' were referenced in our PEIR comments, these are scoped out of the SLVIA. It is understood the Applicant scoped out 'Islands' because they considered that 'The Mona Offshore Wind Project would not directly affect the fabric of the islands (30 no.) and their physical link between the landscape and seascape of Anglesey' and therefore 'There would be no change to this special quality'. We advise the special quality of islands is not confined to the fabric of the islands or any physical link, but it also relates to the contribution the islands make to the scenic and perceptual qualities of the designation. In some locations, for example at VP 24, the Mona Array would be seen in the context of island(s) (Ynys Amlwch), where it would detract from the scenic quality of views towards the island.	White Consultants (2019) Stage 2 report siting principle 14 states: *Particularly avoid developments within buffer distances of several separate designations- Example 1 avoid locations offshore from islands*. In relation to the 'Islands around Anglesey' the proposed Mona Array Area is, at its closest, 30 km from the Anglesey AONB; 33.3 km from Puffin Island and 30 km from Great Orme's Head. The proposed Mona Array Area would appear distant barely discernible, whereas the turbines of consented Awel-y-Môr development would appear as competing with the scale of the headlands and small islands in views, due to their location in the proximity to these coastal features.
REP1-056.380	416. Dark skies within the IoA NL contribute to the special quality of peace and tranquillity. The SLVIA considers aviation warning lights on the turbines would 'be barely visible or not visible at all and therefore there is no potential for significant nighttime effects on the	The night-time visualisations (Figure 39.2 of Volume 6, Annex 8.6: Seascape visualisations (APP-110)) which have been used for the purposes of the assessment have been generated using Resoft WindFarm Release 5, Aviation Lights Manual, which has a default setting for aviation

Reference	Written Submission Comment	Applicant's response
	special qualities'37. Based on our experience of reviewing similar schemes, we consider aviation warning lighting is expected to be visible from the northern coast of Anglesey and the impact on dark skies would not be negligible.	lights of 2,000 candelas, which is the worst-case scenario, i.e. the brightest the lighting would be. However, in good visibility the aviation lighting would be at 200 candelas. The lighting would only be at 2,000 candelas if the visibility was poor, in these conditions the lights would not be visible from shore in any event (see Volume 2, Chapter 8: Seascape and visual resources (APP-060), section 8.8.5).
REP1-056.381	1.11. Eryri National Park - Eryri National Park – Effects on Views and Visual Amenity 417. The SLVIA includes the following representative VPs within ENP38: VP 6: Carnedd Llewelyn (50.7km) (Figures 6.1 - 6.2 and Figure 48) [APP-106] VP 29: Base of Moel Wnion (45.5km) (Figures 25.1 - 25.2) [APP-108] VP 30: Garreg Fawr (42.1km) (Figures 26.1 - 26.2) [APP-108] VP 31: Tal y Fan, summit (42km) (Figures 27.1 - 27.2) [APP-108] VP 32: Foel Lus, summit (38.5km) (Figures 28.1 - 28.2) [APP-109] VP 33: Conwy Mountain, summit (36.7km) (Figures 29.1 - 29.2) [APP-109]	The Applicant notes NRW's response. It should be noted that the viewpoints' assessment is based on the locality of specific viewpoints within a designated landscape, however the Mona SLVIA considered effects within the entire designated areas, including parts, which are outside of the zone of the visual influence of the proposed development.
REP1-056.382	418. Visual receptors at all but VP 6 are assessed within the SLVIA as having high sensitivity to the proposed development. Visual receptors at VP 6 are assessed as very high sensitivity. See comments above. We advise that people on promoted routes such as the Wales Coast Path or Cambrian Way within a designated landscape have the highest levels of sensitivity to changes to their views and visual amenity. Where lower levels of sensitivity are identified, the reasoning for this should be clear. But this is not clear from the SLVIA. In our comments on the PEIR, we advised this information should be added to the summary tables in Volume 6: Annex 8.3: Visual Baseline Technical Report – Offshore Development [APP-101] but this information has not been added.	Please refer to the Applicant's response set out in rows REP1-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding masters associated with the significance of the effect.
REP1-056.383	419. Except for VP 33: Conwy Mountain, the SLVIA concludes that at all viewpoints within ENP the magnitude of change to the views and visual amenity of people would be 'negligible'. Resulting in a minor adverse effect on receptors at VP 6: Carnedd Llewelyn and a negligible to minor adverse effect at VPs 29-32. At VP 33: Conwy Mountain, the SLVIA considers the magnitude of change would be small, resulting in a minor to moderate adverse effect on people's views and visual amenity.	Please refer to the Applicant's response set out in rows REP1-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect.

Reference	Written Submission Comment	Applicant's response
REP1-056.384	420. We advise the magnitude of change at the above viewpoints would be small, except for VP 6 where it would be slightly reduced compared with those VPs closer to the Array, and slightly greater (medium) at VP 33 on account of the closer proximity to the Array and the nature of views at this location. We consider the effect at VP 6 would be minor/moderate adverse, at VPs 29-32 the effect would be moderate adverse and potentially significant, and at VP 33 it would be moderate/major adverse and significant.	Please refer to the Applicant's response set out in rows REP1-056.322 to REP1-056.324 regarding matters associated with magnitude of impact and distance. Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect.
REP1-056.385	Eryri National Park – Effects on Landscape/Seascape Character 421. As outlined in our comments above, the SLVIA has opted to carry out an assessment only against high level landscape/seascape receptors, e.g., the NCLAs. Furthermore, it has determined there is 'no potential to experience significant effects' on any NCLAs beyond 30km of the Array and therefore scopes out all NCLAs on the mainland except for NLCA 08 Arfordir Gogledd Cymru / North Wales Coast. This is despite eight of the SLVIA viewpoints being located within NCLA 06 Eryri (Snowdonia). The approach taken means the effects of the Mona Array on landscape character within the ENP is not reported in the SLVIA.	The effects of the Mona Offshore Wind project on the special qualities of Eryri National Park are presented in Volume 6, Annex 8.5: International and nationally designated landscape study (APP-105). The assessment is informed by an analysis of the theoretical effects with reference to the ZTV on the landscape and seascape baseline within Eryri National Park. Further detail on this has already been presented in PDA-011 (paragraph 1.2.2.12 *et seq*.). Considering the distance between the Mona Array Area and Eryri National Park at 35.9 km, there is no potential for significant cumulative effects on landscape character.
REP1-056.386	422. Within Supplementary Planning Guidance 07 Landscapes and Seascape of Eryri prepared by the ENP Authority, all of the SLVIA VPs above - except VP 6 - are located within LCA 1: Ucheldir y Gogledd. The ZTV39 indicates visibility of the turbines across this mountain landscape, including on the summits of Tal Y Fan, Moel Wnion, Drosgl, and Conwy Mountain. The description of LCA 1 highlights a number of key characteristics which are susceptible to change as a result of the Mona Array. Key characteristics are 'those combinations of elements which help to give an area its distinctive sense of place. If these characteristics change, or are lost, there would be significant consequences for the current character of the landscape'40. These include41: 'Long views north across the coastline, out to sea and to the Isle of Anglesey'. 'A highly tranquil, remote landscape with few modern intrusions and a pervading 'wilderness' quality associated with the mountains'.	The Applicant notes NRW's response.

Reference	Written Submission Comment	Applicant's response
REP1-056.387	423. A specific 'force for change affecting landscape character' is 'Offshore wind turbines visible from the LCA impacting on the tranquillity and remoteness of the landscape'42. This detailed information has not been considered in the SLVIA for the Mona Array but we advise the proposed development would: Adversely impact on the long views north across the coastline and out to sea by introducing an obvious detractor into these views. Adversely impact on the sense of tranquillity and 'wilderness' qualities associated with the mountains by introducing an additional 'modern intrusion' into views. Exacerbate the existing impact of offshore wind turbines on these valued aspects.	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect.
REP1-056.388	424. At locations within LCA 1: Ucheldir y Gogledd, such as the summit of Tal y Fan, we consider the magnitude of change to characteristics of the LCA would be small and the effect moderate adverse.	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect.
REP1-056.389	Eryri National Park – Special Qualities 425. The SLVIA only assesses the impact of the Array on one of the ENP's special qualities: 'tranquillity and solitude – peaceful areas'. The SLVIA considers this special quality is of 'high value' and high sensitivity. We advise that special qualities of a nationally designated landscape should be afforded the highest value and sensitivity within an SLVIA, which in this case is very high. The SLVIA considers the Array would result in a 'negligible' magnitude of change to this quality, resulting in a negligible to minor adverse effect.	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding matters associated with the significance of the effect. The special qualities of nationally designated landscapes have been assessed as being of high sensitivity with reference to the methodology and their status as nationally designated landscapes. A moderate adverse and significant cumulative effect has the potential to occur on one special quality of Eryri National Park, should all the proposed cumulative offshore wind farms (Tier 1 and Tier 2) be developed. However, the Tier 2 offshore wind projects are further from Eryri than Mona and will be less visible due to atmospheric conditions, visual acuity and distance decay. The development of the Mona Offshore Wind Farm will not compromise the integrity of, or the reasons for the designation of, the two National Landscapes or Eryri National Park.
REP1-056.390	426. The magnitude of change judgement is reasoned 'This reflects the short term and reversible nature of the effects and the scale of the change in views which will diminish with increasing distance from the Mona Array Area.43 Considering the lease is for 60 years, we do not agree the effects would be short term. The scale of change in views would diminish with distance, as it would for any	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding masters associated with the significance of the effect.

Reference	Written Submission Comment	Applicant's response
	development anywhere. More importantly, however, the scale of change would be significant at locations which have high sensitivity to the type of change being proposed.	
REP1-056.391	427. Although the special quality of 'Diverse Landscapes' was referenced in the PEIR and our comments on it, this quality has been scoped out of the SLVIA. It is understood the Applicant scoped out this quality because they consider that 'The Mona Offshore Wind Project would not affect the fabric of the diverse landscapes' and therefore 'There would be no change to this special quality'44. We advise this special quality is not confined to the fabric of the landscape but also relates to the character of the ENP and how it is perceived and experienced by people. The full title of the quality is the 'Diverse, high-quality landscapes and seascapes within a small geographic area, ranging from coast to rolling uplands to rugged mountains for which Eryri is famed' and the description refers to evidence such as the ENP being 'named the most beautiful National Park in Europe'.45	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding masters associated with the significance of the effect.
REP1-056.392	428. The effects on views, and scenic and perceptual aspects of the landscape are reported above, and these relate directly to the identified special qualities of the ENP. For the reasons set out above, we consider these qualities would be harmed by the proposed Array.	The Applicant notes NRW's response.
REP1-056.393	1.12. Clwydian Range and Dee Valley National Landscape – Mona Array 429. SLVIA viewpoints within the CRDV NL used for the assessment of the Mona Array are: Viewpoint 10: Graig Fawr (42.3km) (Figures 10.1 - 10.2 and Figure 50) [APP-107 and APP-112] Viewpoint 11 – Moel y Parc (54.1km) (Figures 11.1 – 11.2) [APP-107] Viewpoint 39: Prestatyn Hillside, Offa's Dyke Path / public footpath 405/12 (Figures 35.1 - 35.2) [APP-110] Viewpoint 54: Bridleway north of Golden Grove (43.6km) (Figures 43.1 - 43.2) [APP-111]	The Applicant notes NRW's response.
REP1-056.394	430. Receptors at all viewpoints except VP 39 are assessed as high sensitivity (see comments above). Receptors at VP 39 are assessed as having very high sensitivity. The magnitude of change	

Reference	Written Submission Comment	Applicant's response
	is assessed in the SLIVA as negligible at all viewpoints. The overall effects reported in the SLVIA are negligible to minor adverse at VPs 10 and 11, minor adverse at VP 39, and negligible at VP 54.	Please refer to the Applicant's response set out in rows REP1-056.354 to REP1-056.360 regarding maters associated with the significance of the effect.
REP1-056.395	431. We advise that at all four viewpoints the proposed turbines would be seen behind – and in the gaps between - existing turbines within the 'North Wales offshore wind farm cluster'. Due to its location 'behind' the cluster of existing offshore wind farms, the Mona Array is unlikely to result in any significant landscape or visual effects within the CRDV NL, but non-significant adverse effects would occur. In particular, the relationship between the proposed turbines and existing turbines is expected to result in: An increase in issues such as 'stacking' (blade overlap) and overall visual clutter within views of the sea. Intensify the developed character of the seascape off the north coast of Wales in contrast to the inherent natural beauty of the CRDV NL. Differences in turbine size may distort perspective and a sense of distance, with the more distant turbines (Mona) appearing bigger than those which are closer. Differences in blade size and rotation speed may appear jarring.	From viewpoint 39 (Prestatyn Hillside, Clwydian Range and Dee Valley National Landscape) it would be difficult to discern the Mona Array Area at a distance of 42 km through the large number of intervening existing turbines which are at a distance of approximately 10.5 km at their closest (see REP1-043 for distances for other offshore winds considered in the cumulative effects assessment). In views from the coast the consented Awel-y-Môr development will be seen as an extension to the existing developments, bringing the development with large turbines closer to the coast.
REP1-056.396	1.13. Clwydian Range and Dee Valley National Landscape – Onshore Substation 432. The proposed Onshore Substation is a substantial project with the MDS providing a maximum footprint for the substation of 6.5 hectares and a maximum impermeable footprint of 4.2 hectares. The maximum building dimensions will be 80m wide, 140m long and 15m high, with an 8m wide permanent access road up to 800m in length. The MDS for the substation construction compound is 15 hectares and it is expected to take up to 33 months to construct. Approximately 5.8 hectares of woodland planting is proposed in proximity to the Onshore Substation and 715 m of hedgerow enhancements. The expected lifetime of the Onshore Substation is up to 50 years, although it is noted the lifespan of some components can be extended beyond this period.	The Applicant notes NRW's response.
REP1-056.397	433. SLVIA viewpoints within the CRDV NL used for the assessment of the Onshore Substation are: VP 11 – Offa's Dyke Path, south of Moel Maenefa (Figures 21–22) [APP-158] VP 12 –	The Applicant notes NRW's response.

Reference	Written Submission Comment	Applicant's response
	Offa's Dyke Path, south of Pen-y-Mynydd (Figures 23–24) [APP-158] VP 18 – Graig Fawr summit (Figures 35–36) [APP-159] VP 19 – Offa's Dyke Path / public footpath 405/12, Prestatyn hillside (Figures 37–38) [APP-159]	
REP1-056.398	434. Views from these locations currently provide an outlook across a predominantly rural and attractive landscape, which provides a sympathetic and coherent setting to the NL and Offa's Dyke Path (National Trail). The substation would be visible within this rural context. Receptors at this location will take an interest in the view towards the substation as the mountains of Eryri are visible in the distant background.	A description of the visual change from these viewpoints is provided in section 6.11.2 of Volume 3, Chapter 6: Landscape and visual resources (APP-069). The Applicant confirms that, at each of the viewpoints (11 (view west-southwest from Offa's Dyke Path, to the south of Moel Maenefa), 12 (view west-southwest from Offa's Dyke Path, to the south of Pen-y-Mynydd), 18 (view southwest from Graig Fawr summit, Clwydian Range and Dee Valley NL) and 19 (view southwest from Offa's Dyke Path / public footpath 405/12, Prestatyn hillside, Clwydian Range and Dee Valley NL)), the Mona Onshore Substation would be partly screened by existing vegetation, both in winter and summer views, due to the layers of vegetation between the viewpoint and the location of the substation. The distance from these views means that the top of the substation buildings would be barely noticeable within these distant and elevated, wide panoramic views. The Applicant agrees that receptors at this location will take an interest in the views towards the Mona Onshore Substation due to the panoramic nature of the view with Cefn Meriadog and the higher hills as backdrop to a panoramic farmed landscape.
REP1-056.399	435. Offa's Dyke Path is referenced as a component of the CRDV NL's special qualities (under access, recreation and tourism)46. SPG Policies relevant to this quality include ensuring the attractiveness of the NL's landscape and views as a primary basis for the areas tourism are retained. Safeguarding panoramic views and tranquillity are also referenced under the landscape character special quality.	The Applicant notes NRW's response.
REP1-056.400	436. Receptors at all viewpoints except VP 18 are assessed in the SLVIA as having very high sensitivity. Receptors at VP 18 are assessed as having high sensitivity. The magnitude of change is assessed in the SLIVA as negligible at all viewpoints. The overall effects are reported in the SLVIA as minor adverse at VPs 11, 12, and 19, and negligible to minor adverse at VP 18. In relation to VPs 11 and 12 the Applicant states 'As the new planting becomes	The Applicant notes NRW's response.

Reference	Written Submission Comment	Applicant's response
	established, it would not alter the predicted visual effect in the longer term, as this is an elevated view, but would enhance the character of the view and soften views of the substation'47. Similar comments are made in relation to the visual impact at VP 18.	
REP1-056.401	437. We agree it would be difficult to screen the substation entirely in views from Offa's Dyke Path at VPs 11, 12 and 19, and at summits such as Graig Fawr, due to these locations being considerably more elevated than the substation site. Detailed design measures, including colour selection for built elements will therefore be an important consideration and we note the intention for substation buildings to be finished in recessive colours (as set out in the Design Principles document [APP-189]). Although planting is unlikely to screen the substation in its entirety, new woodland planting around the proposed substation, as illustrated on the Illustrative Landscape and Ecology Strategy Plan within the LEMP [APP-208], will help to integrate the development into its landscape setting – particularly when recessive darker hues / materials are used for the substation buildings and components. In combination, these measures should ensure that any effects on the visual amenity of people within the CRDV NL, and on the character and special qualities of the CRDV NL are not significant.	The Applicant is pleased that the proposed woodland planting around the proposed Mona Onshore Substation, as illustrated on the Illustrative Landscape and Ecology Strategy Plan within the Outline Landscape and Ecology Plan (LEMP) (APP-208), together with the intention for the Mona Onshore Substation buildings to be finished in recessive colours as set out in the Design Principles (APP-189) have been welcomed by NRW.
REP1-056.402	1.14. Cumulative Effects 438. At viewpoints with the IoA NL, the Mona Array is not expected to result in any significant cumulative effects in combination with the existing North Wales offshore wind farm cluster. This is due to (inter alia) the distance of separation between visual receptors within the IoA NL and the existing cluster, and the height of turbines within that cluster.	No significant effects would arise from the development of the Mona Array Area either on its own or cumulatively with the Tier 1 existing and consented offshore wind projects on the IoA NL for the reasons set out in the Applicant's response above.
REP1-056.403	439. There would be a significant increase in the influence of offshore wind turbine development on the north coasts of Anglesey from the combination of the Mona Array and the consented Awel-y-Môr development. For example, at VP: 28 Penmon Point (Figure 56) [APP-112] the gap between the Mona Array and Awel-y-Môr would be small, with each development extending the horizontal field of view affected by the other. Elsewhere, for example at VP 3: summit of Mynydd Eilian (Figure 47) [APP-112], the gap between	The Applicant refers to its response to REP1-056.348.

Reference	Written Submission Comment	Applicant's response
	the two developments would appear small and offshore wind turbine development would be seen across a large horizontal field of view in a location where offshore views are unaffected by development. We advise that at locations such as VPs 28 and 3, the cumulative visual effect, and the cumulative effect on scenic and perceptual characteristics and qualities of the IoA NL, would be greater than the effect of the Mona Array in isolation, and would be significant. Such effects would affect the same special qualities of the NL affected by Awel-y-Môr, i.e. Mona would exacerbate harm to the special qualities harmed by Awel-y-Môr.	
REP1-056.404	440. We consider that incremental change would be noticeable from viewpoints in ENP such as at Vp 33 (Conwy Mountain summit), where the gap between Mona and the North Wales offshore wind farm cluster would appear small due to viewing angles. The Mona Array would extent the field of view affected by offshore wind turbines. The addition of Awel-y-Môr in closer proximity and the extension of the portion of view affected by Mona means significant cumulative visual effects would be experienced by receptors within ENP. Cumulative effects on scenic and perceptual characteristics and qualities of the ENP, resulting from Mona and Awel-y-Môr in combination, would be greater than the effect of the Mona Array in isolation, and would be significant. Mona would exacerbate harm to the same special qualities harmed by Awel-y-Môr.	The consented Awel-y-Môr project will be located at such close proximity to the coast that the combined effect attributable to the addition of the Mona Array Area at a distance of 30 km from viewpoint 33 (Conwy Mountain Summit) would not increase any effects already caused by Awel-y-Môr, which will retain its prominent position in relation to the Great Orme headland. This is also true of both elevated views from the Eryri NP and in framed views across Conwy Bay.
REP1-056.405	441. At locations within the Clwydian Range and Dee Valley AONB, such as VP 39 from Offa's Dyke, the Mona Array would be seen behind the North Wales offshore wind farm cluster, appearing as a wider extension to it, with Awel-y-Môr also visible behind and infilling gaps. There would be an increase in effect, but it is unlikely to be significant.	The Applicant refers to its response to REP1-056.394 and REP1-56-395.
REP1-056.406	442. We advise that the proposal would increase the baseline of offshore wind farms affecting designated landscapes along the North Wales coast, such that significant adverse effects would be widespread across this area. As a result of both the Mona and Awel-y-Môr schemes in combination, people will have to travel ever further west along the north coast of Wales – and in effect to the	The Applicant refers to its response to REP1-056.371. The Morlais tidal energy scheme has very different characteristics to Mona Offshore Wind Project. there are very few similarities between these two technology types from the point of view of potential effects on the surrounding landscape, seascape and visual amenity. The nature of the proposed change and the location and landscape and seascape context of

Reference	Written Submission Comment	Applicant's response
	western coast of Anglesey - to be afforded coastal views unaffected by large scale offshore wind turbine development. It is relevant to note that approval has also been given to the Morlais tidal energy scheme, and it was acknowledged as part of that consenting that it would have a significant adverse effect on another part of the IoA NL; the northwest coast of Holy Island.	both projects would be quite different. There is no relationship or intervisibility between these two projects and therefore no potential for cumulative effects.
REP1-056.407	**Annex C – Fish and Shellfish Ecology Further Detail** "The extent of suitable habitat for cod spawning", "The short term and intermittent nature of the impact" and "Reversibility" [RR-011.41, PDA-008] 443. Populations of cod, a section 7 species under the Environment (Wales) Act 2016, are known to reside in the Irish Sea. Most of the Irish Sea population remain within area, demonstrate limited mixing with neighbouring populations, and the population is understood to be severely depleted. It is also known that cod spawning takes place in and around the proposed Mona project area - this is indicated by the density maps provided within the application documentation. Whilst we agree with the Applicant that suitable cod habitat exists across the Irish Sea, the spawning and nursery maps presented (e.g. figure 1.4 in APP-089) show areas of 'hotspots' i.e., the spawning and nursery locations for the species are not evenly distributed and spawning intensity differs across the region. There is a hotspot for adult cod in the vicinity of the proposed works shown by modelled density maps (Campanella and Van der Kooij, 2021) and a juvenile presence in the area during both cod spawning Quarter 1 (February to April) and Quarter 4 (September to December).	The Applicant acknowledges NRW (A)'s position and Annex C of NRW (A)'s Written Representation. With regards to the temporal nature and intermittency of the impact referenced within Annex C, whilst piling is predicted to be undertaken over a maximum of 114 days, across a two-year piling phase, it is considered highly unlikely that much of this activity will be undertaken during the cod spawning period of January to April, or the reported historic peak of February to March (Coull *et al.*, 1998), given operational constraints during the winter period. Further, 114 days represents approximately 15% of the two-year piling phase, with piling not expected to be undertaken continuously, nor continually at full power, with intermittent periods of no piling activity expected. The Applicants acknowledges the sensitivity of cod to underwater sound effects (which is defined as "high" in Volume 2, Chapter 3: Fish and shellfish ecology; APP-055), however based upon a proportionate assessment of the magnitude of the impact (concluded as "low" as outlined in PDA-008, in response to RR-011), the overall conclusion of significance is considered minor adverse for the project alone. The Applicant has predicted a potential moderate adverse effect to cod at the east Irish Sea mapped high intensity spawning ground during the spawning season in Volume 2, Chapter 3: Fish and shellfish ecology (APP-055) for the Mona Offshore Wind Project cumulatively with other projects and plans (due to increased areas of ensonification should multiple projects undertake piling at the same time), which is significant in EIA terms. Regardless of the difference in position, as a result of this predicted significant effect to cod, the Applicant has committed to development of an Underwater Sound Management Strategy (UWSMS), an Outline of which is provided with the Application (APP-202). The purpose of this strategy is to apply the mitigation hierarchy, from design refinement to the application of additional measures, where required, with stakeholder input to manage the
REP1-056.408	444. NRW (A) agrees that uncertainty exists within the spawning and nursery grounds data, however the lack of a hard boundary around the data does not necessarily mean that spawning grounds are being over-represented. Equally an under-representation could exist, should areas that are important be misinterpreted or not surveyed.	
REP1-056.409	445. It is understood that most Irish Sea cod remain within the Irish Sea management area (International Council for the Exploration of the Sea [ICES] area 7a), with a high site fidelity reported (Fox et al.	

Reference	Written Submission Comment	Applicant's response
	2000). A study by Neat et al. (2014) which tagged and released cod within their management sections and followed their movements, showed limited mixing between stocks, with Irish sea stocks having a restricted feeding and spawning range compared to other stocks around the UK. This therefore highlights the importance of this site for cod spawning and should therefore be considered on a more precautionary basis.	effects of underwater sound to non-significant levels to ensure no residual significant effect. Whilst the UWSMS is proposed to manage the predicted significant cumulative effects of underwater sound to spawning cod as a result of the Mona Offshore Wind Project with other projects and plans (and other relevant species), any measures implemented will be designed to manage the contribution to cumulative effects by the Mona Offshore Wind Project only. As such, the UWSMS will likewise further reduce the minor adverse effects to spawning cod predicted as a result of the Mona Offshore Wind Project alone. Therefore, any change in the assessment for the project alone, will not materially change the outcome of the assessment presented in Volume 2, Chapter 3: Fish and shellfish ecology (APP-055), with the same approach to mitigation under the UWSMS to be applied. The UWSMS will implement the mitigation hierarchy and will consider the final project design as part of this process, defining mitigation measures, if required, to manage the effects of underwater sound (such as temporal management of piling, or the application of additional measures such as Noise Abatement Systems). The UWSMS will be based upon the final design and construction programme and is therefore considered a robust and proportionate measure to manage the impacts of underwater sound to ensure effects to cod during their spawning season are non-significant. The Applicant does not consider it appropriate to apply the same approach to assessment for herring for the Mona Offshore Wind Project alone to cod, due to the discrete and highly substrate-specific nature of herring spawning grounds, versus the broad area available for spawning of cod within the east Irish Sea. The key risk to cod is considered to be through cumulative underwater sound, increasing the areas of spawning habitat which may be subject to ensonification, thereby reducing the available spawning habitat throughout the east Irish Sea, as outlined within the assessment presented in Volume 2, Chapter 3: Fish and shellfish ecology (APP-055).
REP1-056.410	446. Recruitment in 2023 of Cod in ICES section 7a (Irish sea) was 896,000 individuals (95% confidence interval of 0-2,337,000), the lowest ever recorded (ICES, 2024). Disturbance from the Mona project during the sensitive spawning period covering over 20% of the spawning ground for cod, could significantly impact the recruitment of the species in each of the two piling years, which will slow or prevent the recovery of the cod population which is already much depleted in the Irish Sea.	
REP1-056.411	447. ICES have advised a zero Total Allowable Catch (TAC) for 2024, based on precautionary considerations (ICES, 2024). A stock recovery plan for the species has been in place since 2002, with a recovery plan implemented in 2003. Zero catches have been advised for 18 of the 23 years since then. This demonstrates the sensitivity of the species and the long recovery rates for the population as a whole.	
REP1-056.412	448. Cod are hearing specialists, possess anatomical adaptations for hearing, are known to be sensitive to both sound pressure and particle motion (Popper et al. 2019). They display complex courtship and mating behaviour during the spawning season, in which sound and hearing play a pivotal role in finding and attracting mates (Kasumyan, 2009). During the breeding season males protect and defend individual territories (leks) and produce 'grunts' and other noises produced by the swim bladder which attract females. Spawning is dependent on female choice in response to the males vocal and behavioural courtship displays.	
REP1-056.413	449. Anthropogenic noise impacts have been shown to affect larval and juvenile growth and survival. It has been demonstrated that chronic noise exposure in cod during spawning can result in a	

Reference	Written Submission Comment	Applicant's response
	significant reduction in total egg production and fertilisation rates, reducing the total production of viable embryos by over 50% (Sierra-Flores et al. 2015). Studies have shown that exposure to regular anthropogenic noise results in cod larvae using their yolk sac faster, with lower body width-length ratios, and were easier to catch in predator avoidance experiments than the control fish (Nedelec et al. 2015).	
REP1-056.414	450. In addition, fish are likely to be more impacted by external stressors during spawning as they tend to be at their poorest body condition during this time. Catch rates of spawning cod are known to be higher than at other times of the year (De Jong et al. 2020). Stressed mates initiate fewer courtships (Morgan et al. 1999), which could result in a further impact to the population. As demonstrated by these studies, the additional stress placed on the population in their spawning habitat from underwater noise as part of the proposed development could severely impact the growth of the cod population.	
REP1-056.415	451. Irish sea cod are known to stay within a limited area displaying minimal mixing with other nearby stocks (Fox et al. 2000). The impact of piling noise predicting to cover more than 20% of the high intensity spawning grounds over two spawning seasons could impact the success of the cohorts (affecting number and health of offspring produced), with impacts on the overall fitness of the population.	
REP1-056.416	452. The Cod population in the Irish Sea is in poor condition and vulnerable to disturbance impacts, therefore further impacts to spawning such as introduction of anthropogenic noise are likely to prevent or slow recovery to sustainable population levels.	
REP1-056.417	453. NRW (A) does not agree with the Applicant that a duration of 114 days for predicted piling over a 2-year period can be considered an intermittent impact. Although the noise produced is temporary in nature, the impact is not, with the potential to directly affect two years/ two spawning cohorts of the species, with indirect impacts for subsequent cohorts.	

Reference	Written Submission Comment	Applicant's response
REP1-056.418	454. Taking into consideration both the spawning behaviour exhibited by cod, and their known hearing sensitivity and vulnerability to anthropogenic noise, we consider the current approach presented by the Applicant is not sufficiently precautionary to fully assess the impacts of underwater noise to cod.	
REP1-056.419	**Annex D – Marine Licensing Deemed Marine Licence Comments** Development Consent Order Part 1 Interpretation Natural Resources Wales - means the body acting on behalf of the Welsh Ministers pursuant to powers under the 2009 Act or any successor of that function and "NRW" must be construed accordingly The definition currently refers to NRW's role as Licensing Authority in relation to the Marine Licence. However, within the draft DCO, NRW is used to refer to its wider function including as a statutory advisor on the environment E.g. Part 3 16(5) (8), schedule 1 Part 2, 5, 7, 9, 12, 13(2), 18 (1). We question whether an organisation like NRW needs a definition. But if a definition is to be used, we would suggest 'NRW' means Natural Resources Wales.	The definition of "NRW" has been updated in Article 2 of the draft development consent order (C1 F04) (Draft DCO). The definition no longer refers to the Marine and Coastal Access Act 2009 as a separate definition for 'Licencing Authority' was provided in Schedule 14 [PDA-003].
REP1-056.420	2 Within the updated draft DCO (PDA-004) Reference to Mean High Water Springs has been amended to Mean High Water Schedule 14 definition – MHW. The correct reference is MHWS, consistent with terminology in the MACAA 2009 (see section 66(4) and s42 for the definition of Marine Licensable area) In addition, the definition within Schedule 14 deemed Marine Licence should refer to MHWS rather than MHW when referring to the licensable area and activities.	The terms MLWS and MHWS have been removed from the Schedule 14 of the draft development consent order (Document Reference C1 F04) as they are no longer used.
REP1-056.421	3 Commence; in relation to works seaward of MLW, the first carrying out of any licensed marine activities authorised by the deemed marine	The definition of "commence" in Schedule 14, Part 1, paragraph 1 of the draft development consent order (Document Reference C1 F04) (Draft DCO) has been updated to remove reference to 'monitoring surveys'. Other

Reference	Written Submission Comment	Applicant's response
	licence, save for pre-construction surveys and monitoring, and unexploded ordnance surveys and clearance of unexploded ordnance authorised under the deemed marine licence; See section 4.5 of Written Representation.	consequential changes are made throughout Schedule 14. The Applicant retains the ability to undertake non-intrusive pre-construction surveys, unexploded ordnance surveys and clearance of unexploded ordnance prior to the discharge of details set out in condition 18(1). Further, the Applicant has made changes to Condition 13(8) and (9) to ensure that suitable notifications are also provided in relation to these pre-commencement activities. Further in relation to pre-construction surveys, Condition 18(1)(c) requires the undertaker to provide detailed monitoring plans (in accordance with the offshore in principle monitoring plan (APP-201)) to the licencing authority for approval at least four months prior to the first survey. Condition 24 expands on this obligation further. In relation to unexploded ordnance clearance, Condition 21(1) requires the submission of a method statement for approval by the licencing authority before those operations can commence. This method statement will contain relevant controls on unexploded ordnance clearance as required. This can include but will not be limited to the details set out in sub-paragraph 21(1)(a). The Applicant has also added an obligation for a specific offshore written scheme of investigation and protocol for archaeological discoveries (which must accord with the details set out in the outline offshore written scheme of investigation and protocol for archaeological discoveries) to be submitted for approval in relation to unexploded ordnance clearance alongside.
REP1-056.422	Schedule 14 deemed Marine Licence - Reference 4 Definition "commence" means the first carrying out of any licensed marine activities, save for pre-construction surveys, monitoring surveys, unexploded ordnance surveys and clearance of unexploded ordnance, and "commenced" and "commencement" must be construed accordingly See section 4.5 of written representation.	
REP1-056.423	5 Definition – Co-ordinates - all coordinates are latitude and longitude degrees and minutes to two decimal places. These have now been correctly provided in decimal degrees in	Paragraph 1(3)(b), Part 1, Schedule 14 of the draft development consent order (Document Reference C1 F04) has been updated to reflect this comment.

Reference	Written Submission Comment	Applicant's response
	Table 3, however the definition incorrectly refers to co-ordinates as provided in degrees and minutes to two decimal places.	
REP1-056.424	6 Para. 7 The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this licence except that the provisions of section 72(7) and (8) relating to the transfer of the licence apply only to a transfer not falling within article 7 (benefit of order) of the Order. See section 4.3 of written representation.	The Applicant refers to the Applicant's Response to Relevant Representations [PDA-008], rows RR-011.154 to RR-011.156. The Applicant has made updates to Article 7 in order to align the drafting with the Morgan Offshore Wind Project Generation Assets draft development consent order. These changes mean that the undertaker will no longer be able to transfer or grant part of the marine licence, only the whole of the marine licence, under Article 7.
REP1-056.425	7 Table 4 We welcome a number of additional parameters have been included following our Relevant Representation (RR-011). We would however request that the maximum volume of scour protection is broken down to detail both the maximum volume of scour protection for the platforms, and the total volume of scour protection for the generators, rather than a single combined total.	Condition 10, Table 4 of Part 2, Schedule 14 has been updated to include the maximum volume of scour protection for the offshore substation platforms, and the maximum volume of scour protection for the wind turbine generators. The Applicant notes that the inclusion of the parameter for maximum volume of scour protection for offshore substation foundations and wind turbine generators in PDA-003 contained an incorrect figure (1,759,698 m^3) which has now been corrected through the inclusion of the new separate parameters (58,361 m^3 + 1,701,998 m^3 = 1,760,359 m^3).
REP1-056.426	8 Para. 11 (3) An operations and maintenance plan in accordance with the outline operations and maintenance plan must be submitted to and approved by the licensing authority in writing at least four months prior to commencement of the operation of licensed activities and be provided for review and resubmission every three years during the operational phase. Maintenance must be carried out in accordance with the approved plans. As currently written requires both the submission and approval 4 months prior to commencement. Please amend; An operations and maintenance plan in accordance with the outline operations and maintenance plan must be submitted to the Licensing Authority for approval in writing at least four months prior to commencement of the operation of licensed activities and be provided for review and resubmission every three years during the	Condition 11(3) has been updated to reflect NRW's comments. Please see the draft development consent order (C1 F04).

Reference	Written Submission Comment	Applicant's response
	operational phase. Maintenance must be carried out in accordance with the approved plans.	
REP1-056.427	9 Para. 12 Any time period given in this Marine Licence to either the undertaker or NRW may be extended with the agreement of the other party, such agreement not to be unreasonably withheld or delayed. See section 4.7 of Written Representation in relation to requirement 19(2). We consider that this should be amended to; Any time period given in the Marine Licence may be extended with the agreement of the Licensing Authority.	The Applicant refers to the Applicant's Response to Relevant Representations (PDA-008), row RR-011.162. The Applicant maintains that it is necessary and appropriate for four month timescales for approval to be retained in the draft development consent order (C1 F04). Should that timescale need to be extended (or any other within Schedule 14) that can be agreed between the parties, such agreement not to be unreasonably withheld or delayed as set out in Condition 12.
REP1-056.428	10 Para. 16 (2) The undertaker must ensure that any coatings and treatments are suitable for use in the marine environment and are used in accordance with guidelines approved by the Health and Safety Executive and the Environment Agency Pollution Prevention Control Guidelines. Within the Applicant's response to our Relevant Representation (PDA-008) the Applicant confirmed that the EA pollution prevention control guidelines have been withdrawn and will liaise with NRW MLT on an alternative text. We would suggest the following; The undertaker must ensure that any coatings and treatments are suitable for use in the marine environment and are used in accordance with best environmental practice.	The Applicant has updated Condition 16(2), Part 2, Schedule 14 of the draft development consent order (C1 F04) to state that coatings and treatments will be 'in accordance with recognised best practice guidance'. This drafting has been incorporated to align with drafting already present elsewhere within Schedule 14 (for example Condition 18(1)(e)(ii)) and for drafting clarity.
REP1-056.429	11 Para. 17 (2) In the event that any rock material used in the construction of the authorised scheme is misplaced or lost within the Order limits, the undertaker must report the loss in writing to the licencing authority and the MEO within 48 hours and if the licencing authority, in consultation with the MEO, reasonably considers such material to constitute a navigation or environmental hazard (dependent on the	The Applicant has updated Condition 17 Part 2, Schedule 14 of the draft development consent order (Document Reference C1 F04) such that the default position will be material dropped, either as a result of a 'force majeure' event or through loss, will be recovered where it poses a navigational or environmental hazard, unless it is otherwise agreed with the licencing authority. Other drafting changes are made to accommodate this position and to address NRW's comments.

Reference	Written Submission Comment	Applicant's response
	size and nature of the material) the undertaker must, in that event, demonstrate to the licencing authority that reasonable attempts have been made to locate, remove or move any such material. We request that 17 (2) is amended, that the undertaker must report the loss to the Licensing Authority, MEO, Trinity House and the MCA. The condition does not need to specify that consultation will take place with the MEO. The condition should also be amended that the undertaker must locate the material and recover it at its own expense unless otherwise approved by the Licensing Authority. A similar requirement was used within the Hornsea 4 deemed Marine Licence Schedule 12 Part 2 condition 12 (2) In addition, "if reasonable to do so" should be removed. NRW MLT in performing its function would be expected to act reasonably.	
REP1-056.430	12 Para. 17 (3) All dropped objects must be notified to NRW in accordance with the dropped objects plan. On receipt of a notice NRW may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and if reasonable to do so NRW may require obstructions to be removed from the seabed at the undertaker's expense. We maintain the comments provided within our Relevant Representation (RR-011). This condition should be amended to provide that the undertaken must locate the material and recover it at its own expense unless otherwise approved by Licensing Authority. In addition, "if reasonable to do so" should be removed. NRW MLT in performing its function would be expected to act reasonably.	
REP1-056.431	13 Para. 17 (1) If, due to stress of weather or any other cause, the master of a vessel determines that it is necessary to deposit the authorised deposits within or outside of the Order limits because the safety of human life or of the vessel is threatened, within 48 hours the	

Reference	Written Submission Comment	Applicant's response
	undertaker must notify full details of the circumstances of the deposit to NRW, the MEO, Trinity House and the Maritime and Coastguard Agency. This condition should also be amended to include; (2) The unauthorised deposits must be removed at the expense of the undertaker unless written approval is obtained from the Licensing Authority.	
REP1-056.432	14 Para. 18 (1) No part of the authorised scheme may commence until the following (insofar as relevant to that activity or phase of activity) have been submitted to and approved in writing by NRW, in consultation with the relevant statutory nature conservation body Trinity House and the MCA as appropriate The Response to Relevant Representation (PDA-008) highlights which plan and documents are usually approved in consultation with different consultees. However, within condition 18 reference to consultees remains unclear. We would also note that the list remains incomplete, JNCC have been included, however other Statutory Nature Conservation Bodies including NRW Advisory and Natural England have not. We maintain that we do not consider it necessary to list the consultation bodies within this condition, reference to specific consultation bodies can be removed. It will be a matter for NRW MLT as to who it consults under the specific circumstances.	The Applicant has updated the drafting of Condition 18, Part 1, Schedule 14 of the draft development consent order (C1 F04). References made to specific consultees (which were added into PDA-003) have been removed. Instead general wording in Condition 18(1) has been added indicate that the licencing authority can consult with the "relevant statutory historic body, JNCC, Trinity House or the MCA as appropriate" leaving it up to the discretion of the licencing authority as to who they wish to consult in relation to discharging the various elements of the Condition. This does not prevent the licencing authority from consulting with other bodies. Typically specific bodies, like Trinity House, are referenced as consultees in deemed marine licences to give those bodies comfort that they will be involved in discharges of conditions (as appropriate).
REP1-056.433	15 Para 18 (4) Para. 19 (2) , para 20 (3), para 21 (3) NRW must determine an application for approval made under condition x within period of four months commencing on the date the application is received by NRW, unless otherwise agreed in writing with the undertaker. We consider this should be removed. See section 4.7 of the Written Representation.	See row REP1-056.427.
REP1-056.434	16 Para. 21(5) Subject to sub-paragraph (6), an unexploded ordnance close-out	See row REP1-056.216.

Reference	Written Submission Comment	Applicant's response
	report must be submitted to the licensing authority and the JNCC within three months following the end of the unexploded ordnance clearance activity and must include the following for each detonation undertaken We note that reference to Statutory Nature Conservation Bodies within this condition has been amended in the most recent drafting to JNCC. We consider that the close out report may be relevant to other statutory nature conservation bodies including NRW A and NE. However, we maintain that we do not consider it necessary to list the consultation bodies within this condition as detailed in row 14. However, if consultation bodies are included it would appear that some relevant bodies have been omitted.	
REP1-056.435	17 Para. 26.—(5) The undertaker must carry out the monitoring agreed under sub-paragraph (1) and provide the agreed reports to the licensing authority in the agreed format in accordance within four months of completion of the reports, unless otherwise agreed in writing with the licensing authority in consultation with JNCC. Following review, we would suggest that this is reverted back, so that the reports are submitted in line with the agreed timetable which will be agreed as part of approval of the offshore monitoring plan. As above we note that reference to Statutory Nature Conservation Bodies within this condition has been amended in the most recent drafting to JNCC. We consider that the monitoring report may be relevant to other consultees including NRW A and NE.	The Applicant has updated the drafting of Condition 18, Part 1, Schedule 14 of the draft development consent order (C1 F04) to reverse the change made in PDA-003, as per NRW's request.
REP1-056.436	18 We maintain our previous comments and as discussed in section 4.6 of Written Representation. We require a Compliance Report to be submitted for approval prior to commencement of any licensable activity. The compliance report should identify all relevant Plans and monitoring which is applicable to associated works.	The Applicant is considering NRW's comments regarding a compliance report and will provide a further update in relation to this at Deadline 3.