



Department for  
Energy Security  
& Net Zero

# AWEL Y MÔR HABITATS REGULATIONS ASSESSMENT

Regulation 63 of the Conservation of Habitats and Species  
Regulations 2017, and

Regulation 28 of the Conservation of Offshore Marine  
Habitats and Species Regulations 2017



September 2023



# Table of Contents

<b>1</b>	<b>Introduction</b>	<b>3</b>
1.1.	<b>Background</b>	<b>3</b>
1.2.	<b>Habitats Regulations Assessment</b>	<b>3</b>
1.1	<b>RIAA and Statutory Consultation</b>	<b>4</b>
<b>2</b>	<b>Development Description</b>	<b>6</b>
<b>3</b>	<b>Likely Significant Effects Test</b>	<b>8</b>
<b>4</b>	<b>Appropriate Assessment</b>	<b>18</b>
4.1	<b>Conservation Objectives</b>	<b>18</b>
4.2	<b>In-Combination Assessments</b>	<b>19</b>
4.3	<b>Mitigation Measures</b>	<b>20</b>
4.4	<b>Sites which the Applicant and SNCBs Agree No Adverse Effect on Integrity</b>	<b>20</b>
4.5	<b>Sites with Marine Mammal Qualifying Features</b>	<b>21</b>
4.6	<b>Sites with Ornithology Qualifying Features</b>	<b>23</b>
4.6.1	Sites with gannet as qualifying features (Grassholm SPA and Ailsa Craig SPA)	23
4.6.2	Sites with red-throated diver as a qualifying feature (Liverpool Bay SPA)	25
<b>5</b>	<b>Habitats Regulations Assessment Overall Conclusions</b>	<b>28</b>
<b>6</b>	<b>Transboundary Assessment</b>	<b>29</b>

## 1 Introduction

### 1.1. Background

This is a record of the Habitats Regulations Assessment (HRA) that the Secretary of State for Energy Security and Net Zero (the Secretary of State) has undertaken under the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (the Offshore Habitats Regulations) in respect of the Development Consent Order (DCO) for Awel y Môr and its associated infrastructure (the Project). For the purposes of these Regulations the Secretary of State is the competent authority (under the Habitats Regulations and the Offshore Habitats Regulations).

The turbine array is located approximately 10.5km off the north Wales coast at Llandudno [APP-298] and is a sister project to the existing Gwynt y Môr windfarm, to which the proposal includes an interlink cable. The subsea export cables will make landfall at Ffrith beach to the East of Rhyl and West of Prestatyn.

The Project is classified as a NSIP within sections 14(1)(a) and 15(3B) of the Planning Act 2008 because it is within the territorial sea waters adjacent to Wales and its capacity will be more than 100MW. The Project therefore requires development consent in accordance with section 31 of PA2008.

The Application was submitted under section 37 of the Planning Act 2008 (PA2008), which was received in full by the Planning Inspectorate (PINS) on 20 April 2022 and a five-person panel was appointed as the Examining Authority (ExA). The Examination of the application began on 20 September 2022 and was completed on 20 March 2023. The ExA submitted its report of the Examination, including its recommendation (the ExA's Report) to the Secretary of State on 20 June 2023. Numbered references to the ExA's Report are presented in the format "[ER \*.\*.\*]".

Following receipt of the ExA's Report the Secretary of State invited the Applicant and Interested Parties (IPs) to provide additional updates, information, and responses to information<sup>9,12</sup>.

The Secretary of State's conclusions contained in this report have been informed by the ExA's Report, and further information and analysis provided by the Applicant and other IPs post-Examination.

The report also considers the potential effects of the Project on designated sites in other European Economic Area States (transboundary sites). This is included under the transboundary assessment section of the report (Section 6).

### 1.2. Habitats Regulations Assessment

The Habitats Regulations aim to ensure the long-term conservation of certain species and habitats by protecting them from the possible adverse effects of plans and projects.

In the UK, the Habitats Regulations apply as far as the 12 nautical miles (nm) limit of territorial waters. Beyond territorial waters, the Offshore Habitats Regulations serve the same function for the UK's offshore marine area. Following the UK's departure from the European Union, these domestic regulations continue to apply. The Secretary of State notes the Application covers areas within and outside the 12nm limit, so both sets of Regulations apply and hereafter will be referred to collectively as 'the Habitats Regulations'.

The Habitats Regulations provide for the designation of sites for the protection of habitats and species of international importance. These sites are called Special Areas of Conservation (SACs). The Regulations also provide for the classification of sites for the protection of rare and vulnerable birds and for regularly occurring migratory species within the UK and internationally. These sites are called Special Protection

## Awel y Môr Habitats Regulations Assessment

Areas (SPAs). SACs and SPAs together, referred to as European sites in legislation, form part of the UK's national site network (NSN).

The Convention on Wetlands of International Importance 1972 (the Ramsar Convention) provides for the listing of wetlands of international importance. These sites are called Ramsar sites. Government policy is to afford Ramsar sites in the UK the same protection as sites within the NSN (collectively referred to in this HRA as protected sites).

Regulation 63 of the Conservation of Habitats and Species Regulations 2017 provides that:

*....before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in-combination with other plans or projects), and (b) is not directly connected with or necessary to the management of that site, [the competent authority] must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.*

And that: *In the light of the conclusions of the assessment, and subject to regulation 64 [IROPI], the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).*

Regulation 28 of the Conservation of Offshore Marine Habitats and Species Regulations 2017 contains similar provisions:

*Before deciding to undertake, or give any consent, permission or other authorisation for, a relevant plan or project, a competent authority must make an appropriate assessment of the implications of the plan or project for the site in view of that site's conservation objectives.*

And that:

*In the light of the conclusions of the assessment, and subject to regulation 29 [IROPI], the competent authority may agree to the plan or project only if it has ascertained that it will not adversely affect the integrity of the European offshore marine site or European site (as the case may be).*

This Project is not directly connected with, or necessary to, the management of a protected site. The Habitats Regulations require the Secretary of State to consider whether a project is likely to have a significant effect (LSE) on any such site, alone or in-combination with other plans and projects. Where the potential for LSE cannot be excluded, an appropriate assessment (AA) of the implications of the project for that site in view of its conservation objectives must be completed. Therefore, the Secretary of State must determine whether the project will have an adverse effect on the integrity of the site(s). In this document, the first stage assessment of LSEs and, where required, the second stage assessment (the AA) to determine whether there is an adverse effect on the integrity of a site, are collectively referred to as the HRA. The HRA refers only to sites within UK jurisdiction.

### 1.1 RIAA and Statutory Consultation

Under the Habitats Regulations and the Offshore Habitats Regulations the competent authority must, for the purposes of an AA, consult the appropriate nature conservation body and have regard to any representation made by that body within such reasonable time as the authority specifies.

Natural Resources Wales is the Statutory Nature Conservation Body (SNCB) for Wales and for Welsh waters within the 12 nm limit. The Joint Nature Conservation Committee (JNCC) is the SNCB beyond 12 nm, but this duty has been discharged by Natural Resources Wales following the 2013 Triennial Review

## Awel y Môr Habitats Regulations Assessment

of both organisations<sup>1 2</sup>. However, JNCC retains responsibility as the statutory advisor for protected sites that are located outside the territorial sea and UK internal waters (i.e., more than 12 nm offshore) and as such continues to provide advice to Natural Resources Wales on the significance of any potential effects on interest features of such sites.

The ExA prepared a Report to Inform the Appropriate Assessment (RIAA) [REP8-055], with support from the Planning Inspectorate's Environmental Services Team. The RIAA was based on matrices provided by the Applicant and relevant information provided by Interested Parties. The RIAA documented the information received during the Examination (up until 20 February 2023) and presented the ExA's understanding of the main facts regarding the HRA to be carried out by the Secretary of State.

The RIAA was published on the Planning Inspectorate's Nationally Significant Infrastructure Project website<sup>3</sup> and the ExA notified Interested Parties that it had been published. Consultation on the RIAA was undertaken between 22<sup>nd</sup> February 2023 and 15<sup>th</sup> March 2023. The RIAA was issued to ensure that Interested Parties, including the SNCBs, were consulted formally on Habitat Regulations matters, as required under regulation 63(3) of the Habitats Regulations and regulation 28(4) of the Offshore Habitats Regulations.

The Secretary of State is content to accept the ExA's recommendation that the RIAA, and consultation on it, represents an appropriate body of information to enable the Secretary of State to fulfil his duties in respect of the UK's national site network.

In addition, this HRA has been compiled using evidence from the application documents and consultation responses, which are available on the Planning Inspectorate's Nationally Significant Infrastructure Project website, including:

- The ExA's Report;
- The Applicant's Report to Inform the Appropriate Assessment (RIAA) [REP8-055];
- The Applicant's Report on the Implications for European Sites (RIES) [OD-021]; and
- Written responses to the Secretary of State's requests for information<sup>13 14</sup>.

Key information from these documents is summarised in this HRA.

<sup>1</sup> <https://www.gov.uk/government/publications/triennial-review-of-the-environment-agency-ea-and-natural-england-ne>

<sup>2</sup> <https://www.gov.uk/government/publications/triennial-review-of-the-joint-nature-conservation-committee-jncc>

## 2 Development Description

The Project comprises WTGs, offshore substation platforms and associated infrastructure required to transmit electricity generated to the National Grid network via a grid connection at Bodelwyddan as well as the infrastructure required to operate and maintain the wind farm [REP8-055]. Key permanent components include:

### *Offshore*

- Foundations;
- Turbines (up to 34 at the larger end of the design envelope and up to 50 at the smaller end);
- Two offshore platforms (OSPs);
- One meteorological mast (met mast);
- Three permanent vessel moorings (PVMs);
- Subsea inter-array cables linking individual WTGs, the met mast and PVMs to one another and to the OSPs;
- Subsea export cables linking OSPs to shore;
- Interlink cable between Awel y Môr and Gwynt y Môr;
- Scour protection around foundations;
- Cable protection where sufficient cable burial is not achievable; and
- Cable crossings.

See Figure 1 for location of offshore infrastructure.

### *Onshore*

- Infrastructure at landfall and Horizontal Directional Drilling (HDD) installations where the offshore cables are brought ashore;
- Up to two Transition Joint Bays (TJBs) connecting the offshore cables to the onshore cables;
- Installed cable ducts, joint pits and cables comprising up to two circuits;
- Trenchless installations to facilitate cable crossings of roads, watercourses and potentially areas of woodland;
- The on shore sub-station at Bodelwyddan; and
- Up to two interconnecting cable circuits for the grid connection from the OnSS to the existing National Grid substation.

The subsea export cables will make landfall at Ffrith beach to the East of Rhyl and West of Prestatyn. The onshore export cable corridor (ECC) (approximately 14km) would be sited predominantly through agricultural land to a new onshore substation (OnSS) to the west of St Asaph's Business Park, before connecting to the existing National Grid substation.

Awel y Môr Habitats Regulations Assessment

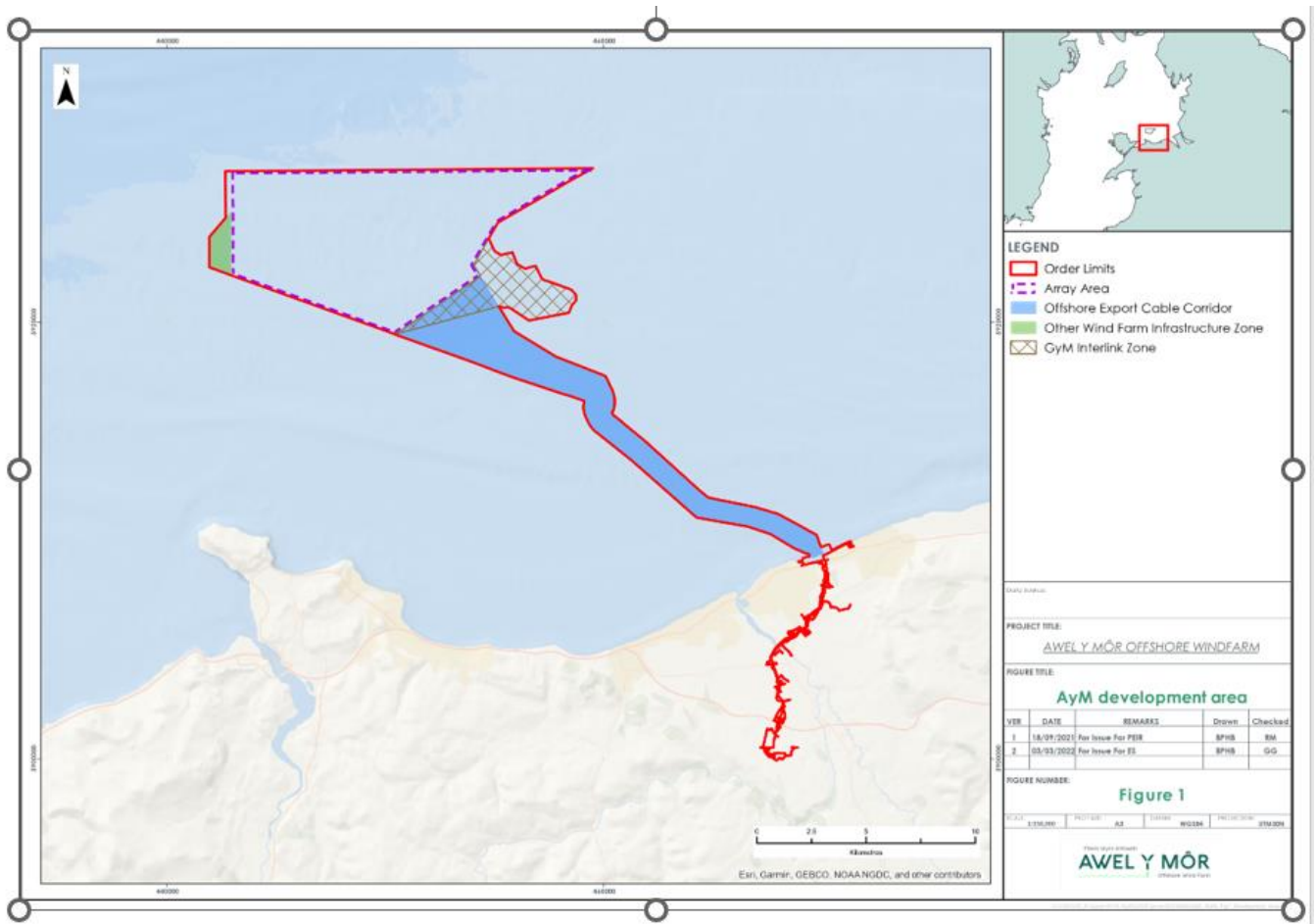


Figure 1: Proposed Location of the Offshore Infrastructure



### 3 Likely Significant Effects Test

Under regulation 63 of the Habitats Regulations and regulation 28 of the Offshore Habitats Regulations, the Secretary of State must consider whether a plan or project will have a LSE on a protected site, either alone or in-combination with other plans or projects.

The purpose of this section is to identify any LSEs on protected sites that may result from the Project and to record the Secretary of State's conclusions on the need for an AA.

This first stage in the HRA process uses the threshold of LSE to determine whether effects on protected sites should be the subject of further assessment. The Habitats Regulations do not define the term LSE. However, in the Waddenzee case (Case C-127/02)<sup>3</sup> the European Court of Justice found that an LSE should be presumed, and an AA carried out if it cannot be excluded on the basis of objective information that the plan or project will not have significant effects on the conservation objectives of the site concerned, whether alone or in-combination with any other project. The Advocate General's opinion of the Sweetman case (Case C-258/11)<sup>4</sup> further clarifies the position by noting that, for a conclusion of an LSE to be made "*there is no need to **establish** such an effect...it is merely necessary to determine that there **may** be such an effect*" (original emphasis). For the reasons highlighted above the assessment process follows the precautionary principle throughout and the word 'likely' is regarded as a description of a risk (or possibility), as opposed to a probability.

The Applicant screened 36 National Site Network sites and concluded that an LSE could not be excluded for 32 of them (Table 1). Two sites were excluded following changes to the boundary of the Project.

While IPs raised concerns about the extent of the Applicant's screening for LSE, these were resolved in the course of the Examination. All the relevant ANCBs agreed with the Applicant's conclusions on LSE.

The ExA was satisfied that the Applicant's final HRA Report identified all the LSE that could result from the Project alone or in-combination with other plans or projects and this was not disputed by any IPs.

<sup>3</sup> Judgment of the Court (Grand Chamber), 7 September 2004. Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij. Reference for a preliminary ruling: Raad van State - Netherlands. Case C-127/02.

<sup>4</sup> Judgment of the Court (Third Chamber), 11 April 2013. Peter Sweetman and Others v An Bord Pleanála. Request for a preliminary ruling from the Supreme Court (Ireland) Case C-258/11.

**Table 1: National site network sites and features for which an LSE could not be excluded (alone or in combination with other plans or projects) (From Report on the Implications for European Sites)**

DESIGNATED SITE	FEATURE(S) SCREENED IN SITE	POTENTIAL FOR LIKELY SIGNIFICANT EFFECT		
		CONSTRUCTION	O&M	DECOMMISSIONING
Y Fenai a Bae Conwy/ Menai Strait and Conwy Bay SAC	Sandbanks which are slightly covered by sea water all the time Reefs Large shallow inlets and bays Submerged or partially submerged sea caves	Physical habitat loss/ disturbance Suspended sediment and deposition Pollution Marine INNS Changes to physical processes	Physical habitat loss/ disturbance Suspended sediment and deposition Pollution Marine Invasive Non-Native Species (INNS) Electromagnetic Frequency (EMF) Changes to physical processes	Physical habitat loss/ disturbance Suspended sediment and deposition Pollution Marine INNS Changes to physical processes
	Mudflats and sandflats not covered by seawater at low tide	Suspended sediment and deposition Pollution Marine INNS Changes to physical processes	Suspended sediment and deposition Pollution Marine INNS Changes to physical processes	Suspended sediment and deposition Pollution Marine INNS Changes to physical processes
Dee Estuary/ Aber Dyfrdwy SAC	Mudflats and sandflats not covered by seawater at low tide <i>Salicornia</i> and other annuals colonizing mud and sand Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritima</i> ) Estuaries	Suspended sediment and deposition Pollution Marine INNS	Suspended sediment and deposition Pollution Marine INNS EMF Changes to physical processes	Suspended sediment and deposition Pollution Marine INNS
	Sea lamprey River lamprey	Underwater noise Suspended sediment and deposition Pollution	Pollution EMF	Underwater noise Suspended sediment and deposition Pollution
River Dee and Bala Lake/ Afon Dyfrdwy a Llyn	Atlantic salmon Sea lamprey River lamprey	Underwater noise Suspended sediment and deposition Pollution	Pollution EMF	Underwater noise Suspended sediment and deposition Pollution

## Awel y Môr Habitats Regulations Assessment

Tegid SAC				
North Anglesey Marine/ Gogledd Môn Forol SAC	Harbour porpoise	Underwater noise	No LSE	Underwater noise
Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC	Harbour porpoise	Underwater noise	No LSE	Underwater noise
Cardigan Bay/ Bae Ceredigion SAC	Grey seal Bottlenose dolphin	Underwater noise	No LSE	Underwater noise

North Channel SAC	Harbour porpoise	Underwater noise	No LSE	Underwater noise
Pen Llŷn a'r Sarnau/ Lleyn Peninsula and the Sarnau SAC	Bottlenose dolphin Grey seal	Underwater noise	No LSE	Underwater noise
West Wales Marine/ Gorllewin Cymru Forol SAC	Harbour porpoise	Underwater noise	No LSE	Underwater noise
Pembrokeshire Marine/Sir Benfro Forol SAC	Grey seal	Underwater noise	No LSE	Underwater noise

Liverpool Bay/ Bae Lerpwl SPA	Common scoter (nonbreeding) Red-throated diver (nonbreeding)	Direct disturbance and displacement	Direct disturbance and displacement Barrier effect	Direct disturbance and displacement
	Assemblage feature: Redbreasted merganser	Direct disturbance and displacement	Direct disturbance and displacement Barrier effect	Direct disturbance and displacement

Awel y Môr Habitats Regulations Assessment

			Risk of collision on migration	
	Common tern (breeding)† Little tern (breeding)†	No LSE	Risk of collision on migration	No LSE
	Little gull (non-breeding)	No LSE	Risk of collision	No LSE

	Supporting habitat for all features (in-combination only)	Physical loss and damage Effects on prey availability Smothering of habitats	Physical loss and damage Effects on prey availability Smothering of habitats	Physical loss and damage Effects on prey availability Smothering of habitats
Dee Estuary SPA (offshore)	Sandwich tern (nonbreeding)	No LSE	Risk of collision on migration Barrier effect Direct disturbance and displacement	No LSE
	Common tern (breeding) <sup>a</sup> Little tern (breeding) Bar-tailed godwit (nonbreeding) Redshank (non-breeding) Shelduck (non-breeding) Teal (non-breeding) Pintail (non-breeding) Oystercatcher (nonbreeding) Grey plover (nonbreeding) Knot (non-breeding) Dunlin (non-breeding)	No LSE	Risk of collision on migration	No LSE

	Black-tailed godwit (nonbreeding) Curlew (non-breeding) Waterbird assemblage			
	Supporting habitats for all features (in-combination only)	Increases in suspended sediment	Increases in suspended sediment Water quality effects from pollution Marine INNS	Increases in suspended sediment

Awel y Môr Habitats Regulations Assessment

		Water quality effects from pollution Marine INNS	EMF	Water quality effects from pollution Marine INNS
Dee Estuary SPA (onshore)	Little tern Sandwich tern (nonbreeding) Bar-tailed godwit (nonbreeding) Redshank (non-breeding) Shelduck (non-breeding) Teal (non-breeding) Pintail (non-breeding) Oystercatcher (nonbreeding) Grey plover(non-breeding) Knot (non-breeding) Dunlin (non-breeding)	Onshore visual and/ or noise disturbance to species	Onshore visual and/ or noise disturbance to species Risk of collision on migration	Onshore visual and/ or noise disturbance to species
	Black-tailed godwit (nonbreeding) Curlew(non-breeding) Waterbird assemblage			
Anglesey Terns/ Morwenoliaid Ynys Mon SPA	Sandwich tern (breeding) Roseate tern (breeding)	No LSE	Direct disturbance and displacement Risk of collision Barrier effect	No LSE
	Common tern (breeding) Arctic tern (breeding)	No LSE	Risk of collision (screened in on a precautionary basis as requested) Barrier effect (screened in on a precautionary basis as requested)	No LSE
Ribble and Alt Estuaries SPA	Lesser black-backed gull (breeding)	No LSE	Risk of collision	No LSE
Morecambe Bay and Duddon Estuary SPA	Lesser black-backed gull (breeding and non- breeding) Herring gull (breeding) <sup>b</sup>	No LSE	Risk of collision	No LSE

## Awel y Môr Habitats Regulations Assessment

	Waterbird assemblage great black-backed gull (breeding and non-breeding) <sup>c</sup>			
Bowland Fells SPA and pSPA	Lesser black-backed gull (breeding) <sup>b</sup>	No LSE	Risk of collision	No LSE
Ailsa Craig SPA	Lesser black-backed gull (breeding and non-breeding) Assemblage feature: Kittiwake (breeding) <sup>d</sup>	No LSE	Risk of collision	No LSE
	Gannet (breeding) <sup>d</sup>	Direct disturbance and displacement	Direct disturbance and displacement Risk of collision	Direct disturbance and displacement
Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA	Manx shearwater (breeding)	Displacement	Displacement	Displacement
Copeland Islands SPA	Manx shearwater (breeding) <sup>d</sup>	Displacement	Displacement	Displacement
Skomer, Skokholm and the Seas off Pembrokeshire/ Sgomer, Sgogwm a Moroedd Penfro SPA	Assemblage feature: Kittiwake (breeding and non-breeding) Lesser black-backed gull (breeding) <sup>d</sup>	No LSE	Risk of collision	No LSE
	Puffin (breeding)	Disturbance and displacement	Disturbance and displacement	Direct disturbance and displacement
	Manx shearwater	Displacement	Displacement	Displacement

## Awel y Môr Habitats Regulations Assessment

	(breeding) <sup>d</sup> Storm petrel (breeding)  Assemblage features: Guillemot (non-breeding) Razorbill (non-breeding)			
Rathlin Island SPA	Assemblage feature: puffin (breeding)	Direct disturbance and displacement	Direct disturbance and displacement	Direct disturbance and displacement
Grassholm SPA	Gannet (breeding)	Direct disturbance and displacement	Direct disturbance and displacement Risk of collision	Direct disturbance and displacement
Ynys Seiriol/ Puffin Island SPA	Cormorant (breeding)	Displacement	Barrier effect Collision	Displacement
Traeth Lafan/ Layan Sands, Conway Bay SPA	Oystercatcher (breeding) Curlew (breeding) Great crested grebe (on passage) Red-breasted merganser (wintering)	No LSE	Risk of collision on migration	No LSE
Aber Dyfi/ Dyfi Estuary SPA	Greenland white-fronted goose (wintering)	No LSE	Risk of collision on migration	No LSE
Burry Inlet SPA	Shelduck (wintering) Wigeon (wintering) Teal (wintering) Pintail (wintering) Shoveler (wintering) Oystercatcher (wintering) Grey plover (wintering) Knot (wintering) Dunlin (wintering)	No LSE	Risk of collision on migration	No LSE

Awel y Môr Habitats Regulations Assessment

	Curlew (wintering) Redshank (wintering) Turnstone (wintering) Waterbird assemblage (wintering)			
Severn Estuary (UK) SPA	Bewick's swan (wintering) Dunlin (wintering) Gadwall (wintering) Greater white-fronted goose (wintering) Redshank (wintering) Shelduck (wintering) Waterbird assemblage (wintering)	No LSE	Risk of collision on migration	No LSE
Burry Inlet Ramsar site	Ramsar criterion 5 – waterbird assemblage of international importance (wintering) Ramsar criterion 6 – species/populations occurring at levels of international importance: Pintail (wintering) Oystercatcher (wintering) Knot (wintering) Redshank (spring/autumn)	No LSE	Risk of collision on migration	No LSE
The Dee Estuary Ramsar site	Ramsar Criterion 1: Extensive intertidal mud and sand flats with large expanses of saltmarsh	Suspended sediment and deposition Pollution INNS Changes to physical processes	Suspended sediment and deposition Pollution INNS EMF Changes to physical processes	Suspended sediment and deposition Pollution INNS Changes to physical processes



Awel y Môr Habitats Regulations Assessment

	<p>Ramsar criterion 5 – waterbird assemblage of international importance (wintering)</p> <p>Ramsar criterion 6 – species/populations occurring at levels of international importance:                  Redshank (peak counts in spring/autumn) Shelduck (wintering)                  Teal (wintering)                  Pintail (wintering)                  Oystercatcher (wintering)                  Grey plover (wintering)                  Knot (wintering)                  Dunlin (wintering)                  Black-tailed godwit (wintering)                  Curlew (wintering)</p>	<p>Visual and/ or noise disturbance to species (onshore)</p>	<p>Visual and/or noise disturbance to species (onshore)                  Risk of collision during migration (offshore)</p>	<p>Visual and/ or noise disturbance to species (onshore)</p>
--	---	--	--	--

	Bar-tailed godwit (wintering)			
Ribble and Alt Estuaries Ramsar site	<p>Ramsar criterion 6 – species/populations occurring at levels of international importance:                  Lesser black-backed gull (breeding and non- breeding)</p>	No LSE	Risk of collision	No LSE
Morecambe Bay Ramsar site	<p>Ramsar criterion 6 – species/populations occurring at levels of international importance: Herring gull (breeding)<sup>a</sup>                  Lesser black-backed gull (breeding and non- breeding)</p>	No LSE	Risk of collision	No LSE

## Awel y Môr Habitats Regulations Assessment

<p>Severn Estuary Ramsar site</p>	<p>Ramsar criterion 5 – waterbird assemblage of international importance (wintering) Ramsar criterion 6 – species/populations occurring at levels of international importance: Bewick's swan (wintering) Dunlin (wintering) Gadwall (wintering) Greater white-fronted goose (wintering) Redshank (wintering) Shelduck (wintering) Waterbird assemblage including pintail*, teal* and ringed plover*</p>	<p>No LSE</p>	<p>Risk of collision on migration</p>	<p>No LSE</p>
---------------------------------------	---	---------------	---------------------------------------	---------------

**a-** Listed as passage feature in Table 5 of the RIAA [APP-047] but as breeding feature on the JNCC website.

**b-** Listed in as breeding and non-breeding feature in Table 5 of the RIAA but as a breeding feature in the site conservation objectives

**c-** Not listed individually in site conservation objectives, appears to be part of the assemblage feature

**d-** Listed as assemblage feature in both breeding and non-breeding seasons in the RIAA but as part of the assemblage feature in the breeding season only on the JNCC website

**e-** Originally listed as individual features in the RIAA but confirmed by NRW (2.101 [REP1-080]) as part of the assemblage feature

**f-** Originally listed as individual features in the RIAA but confirmed by NRW (2.101 [REP1-080]) as part of the assemblage feature

## 4 Appropriate Assessment

The requirement to undertake an AA is triggered when a competent authority, in this case the Secretary of State, determines that a plan or project is likely to have a significant effect on a protected site either alone or in-combination with other plans or projects. Guidance issued by Defra<sup>5</sup> states that the purpose of an AA is to assess the implications of the plan or project in respect of the site's conservation objectives, either individually or in-combination with other plans and projects, and that the conclusions should enable the competent authority to ascertain whether the plan or project will adversely affect the integrity of the site concerned. Furthermore, Regulation 63 of the Habitats Regulations and Regulation 28 of the Offshore Habitats Regulations specify that a plan or project must be assessed against the site's conservation objectives, the focus is therefore specifically on the features for which the protected site is designated.

The purpose of this AA is to determine whether adverse effects on the integrity (AEoI) of the features of the 32 sites identified can be excluded as a result of the Project alone or in-combination with other plans and projects in view of the site's conservation objectives and using the best scientific evidence available.

In accordance with the precautionary principle embedded in the integrity test and established through case law, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the protected site, and this must be demonstrated beyond all reasonable scientific doubt. If the competent authority cannot exclude an adverse effect on integrity of the affected protected sites beyond all reasonable scientific doubt, then it can only agree to a plan or project if it complies with the requirements of Regulation 64 of the Habitats Regulations and Regulations 28 and 29 of the Offshore Habitats Regulations. These Regulations provide that the competent authority may agree to the plan or project only if satisfied that there are no alternative solutions, and that the plan or project must be carried out for imperative reasons of overriding public interest (IROPI). In addition, Regulation 68 of the Habitats Regulations and Regulation 36 of the Offshore Habitats Regulations require compensatory measures to be secured which maintain the overall coherence of the national site network (NSN).

### 4.1 Conservation Objectives

Defra Guidance indicates that disturbance to a species or deterioration of a protected site must be considered in relation to the integrity of that site and its conservation objectives<sup>6</sup>. It states that "*the integrity of a site is the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was designated*".

Conservation objectives have been established by Natural Resources Wales and Natural England for those sites within their areas. When met, each site will contribute to the overall favourable conservation status of the species or habitat feature across its natural range. Conservation objectives outline the desired state for a protected site, in terms of the interest features for which it has been designated. If these interest features are being managed in a way which maintains their nature conservation value, they are assessed as being in a 'favourable condition'. An adverse effect on integrity is likely to be one which prevents the site from making the same contribution to favourable conservation status for the relevant feature as it did at the time of its designation. There are no set thresholds at which impacts on site integrity are considered adverse. This is a matter for interpretation on a site-by-site basis, depending on the designated feature and nature, scale, and significance of the impact.

<sup>5</sup> <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site>

<sup>6</sup> <https://www.gov.uk/guidance/appropriate-assessment#what-must-an-appropriate-assessment-contain>

## Awel y Môr Habitats Regulations Assessment

Natural Resources Wales and Natural England have issued generic conservation objectives<sup>7</sup>, which should be applied to each interest feature of the site. Supplementary advice on conservation objectives provides site-specific information to give greater clarity to what might constitute an adverse effect on a site's interest feature. Supplementary advice on conservation objectives is subject to availability and updated on a rolling basis.

Where supplementary advice is not available for a site, Natural Resources Wales and Natural England advise that HRAs should use the generic objectives and apply them to the site-specific situation. For SPAs, the overarching objective is to avoid the deterioration of the habitats of qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the Birds Directive. This is achieved by, subject to natural change, maintaining and restoring:

- The extent and distribution of the habitats of the qualifying features.
- The structure and function of the habitats of the qualifying features.
- The supporting processes on which the habitats of the qualifying features rely.
- The populations of the qualifying features.
- The distribution of the qualifying features within the site.

For SACs, the overarching objective is to avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving favourable conservation status of each of the qualifying features. This is achieved by, subject to natural change, maintaining and restoring:

- The extent and distribution of the qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

The conservation objectives and, where available, supplementary advice on conservation objectives have been used by the Secretary of State to consider whether the Project has the potential to have an adverse effect on the integrity of sites, either alone or in-combination with other plans or projects. The potential for the Project to have an adverse effect on site integrity is considered for each site in turn.

### 4.2 In-Combination Assessments

The Applicant addressed potential in-combination effects within [REP8-055] which sets out the methodology applied. The following criteria was used to identify plans and projects for consideration in-combination:

- Permitted ongoing activities, such as discharge consents and abstraction licences;
- Approved or consented plans which have not yet been completed;
- Plans and projects where the application for consent has been submitted but has not yet been approved by the competent authorities;

<sup>7</sup> Natural England (2019): Conservation Objectives for European Sites in England: Strategic Standard.

## Awel y Môr Habitats Regulations Assessment

- Plans and projects which are reasonably foreseeable, i.e., projects for which an application has not yet been submitted, but which are likely to progress before completion of the development being assessed and for which sufficient information is available to adequately assess the likelihood of cumulative and in combination effects;
- Projects that are operational;
- Projects that are under construction;
- Permitted application(s) not yet implemented;
- Submitted application(s) not yet determined;
- All refusals subject to appeal procedures not yet determined;
- Projects on the National Infrastructure's programme of projects; and
- Projects identified in the relevant development plan (and emerging development plans – with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited and the degree of uncertainty which may be present.

### 4.3 Mitigation Measures

The RIAA [REP8-055] summarises the mitigation measures which would be implemented to avoid or reduce effects on Protected sites. These measures are not secured through the draft DCO, but rely on conditions being attached to Marine Licences for the Project. The Applicant provided a Schedule of Mitigation and Monitoring, and a Marine Licence Principles document [REP8-016] and [REP8-014] which describe the mitigation measures which would be secured through conditions on marine licences.

NRW's Marine Licensing Team (MLT) advised that it agreed with the Applicant's approach because it does not consider it appropriate to duplicate controls on the Project in both the DCO and any marine licence issued in future [REP1-080]. The MLT confirmed that a marine licence application had been submitted by the Applicant [REP1-080].

NRW, in its capacity as a statutory advisor, also confirmed that it was satisfied with the mitigation measures proposed in the Marine Licence Principles document and the Schedule of Mitigation and Monitoring [REP5-039, REP8-048]. It provided additional advice on what it would prefer to see in terms of specific mitigation measures which is discussed further below. However, it also noted that the details of mitigation measures can be established post-DCO consent and that it would be consulted by the MLT during the marine licence determination.

The ExA was satisfied that the mitigation and management plans (which would not form part of the DCO) will be secured as part of the ML process and outlined in the MLP [REP8-014]. The Marine Licence functions carried out by NRW MLT should adequately secure and control the mitigation measures required for the Project. In this respect the ExA also noted that the DCO could not be implemented unless in accordance with the terms of a granted marine licence.

### 4.4 Sites which the Applicant and SNCBs Agree No Adverse Effect on Integrity

The Applicant's HRA Report and Integrity Matrices [APP-034] concluded that the Project would not result in an adverse effect on the integrity of the following protected sites either alone or in combination with other plans or projects:

- Menai Strait and Conwy Bay SAC;
- Dee Estuary SAC;
- River Dee and Bala Lake SAC;
- Dee Estuary SPA and Ramsar site;
- Anglesey Terns SPA;

## Awel y Môr Habitats Regulations Assessment

- Ribble and Alt Estuary SPA and Ramsar site;
- Morecombe Bay and Duddon Estuary SPA and Ramsar site;
- Bowland Fells SPA and pSPA;
- Aberdaron Coast and Bardsey Island SPA;
- Copeland Islands SPA;
- Skomer, Skokholm and the seas off Pembrokeshire SPA;
- Rathlin Island SPA;
- Puffin Island SPA;
- Layan Sands, Conwy Bay SPA;
- Dyfi Estuary SPA;
- Burry Inlet SPA and Ramsar site; and
- Severn Estuary SPA and Ramsar site.

No IPs raised any concerns in relation to the Applicant's conclusions for these sites and features. NRW confirmed that provided the mitigation measures listed in the schedule of Mitigation and Monitoring and Marine Licence Principles document was secured that it is unlikely that AEoI on the above sites would arise, either alone or in combination with other plans or projects.

On this basis the ExA was satisfied that an adverse effect on integrity on these sites and their qualifying features can be excluded.

The Secretary of State agreed with the ExA that an adverse effect on the integrity on these sites can be excluded.

### 4.5 Sites with Marine Mammal Qualifying Features

The Applicant assessed the potential for an AEoI of the following SACs where marine mammals are a qualifying feature:

- North Anglesey Marine SAC (harbour porpoise);
- Dynesfeydd Mon Forol SAC (harbour porpoise);
- Ceredigion Bay (grey seal and bottlenose dolphin);
- North Channel SAC (harbour porpoise);
- Lleyn Peninsular and Sarnau SAC (grey seal and bottlenose dolphin); and
- West Wales Marine SAC (harbour porpoise); and
- Pembrokeshire Marine SAC (grey seal).

Potential for LSEs were identified from underwater noise during construction, decommissioning, piling and clearance of unexploded ordnance (UXO) which could result in injury or disturbance to marine mammals. The Applicant proposed the use of a Marine Mammal Mitigation Protocol (MMMP) including measures such as soft start and ramp-up of piling to reduce such risks to a negligible level. Furthermore, disturbance from vessels during construction would be agreed with JNCC and NRW.

The Applicant assessed the extent of the area that would be disturbed based on:

- the dose-response approach for piling;
- the Effective Deterrent Response (EDR) for piling and clearance of UXO;
- the Temporary Threshold Shift (TTS) – onset approach for clearance of UXO; and
- the EDR approach for UXO clearance.

The Applicant stated that, based the dose-response approach only, harbour porpoise in 5.3% of the North Anglesey Marine SAC around the array could be affected by piling. This is below the threshold in the conservation objectives.

## Awel y Môr Habitats Regulations Assessment

Furthermore, the Applicant predicted that North Anglesey Marine SAC would be the only site affected by disturbance from piling/ UXO clearance, and 0.24% of the SAC would be disturbed. This was based upon the assumption that the disturbance will be limited to 26km range using the EDR approach.

In relation to the TTS-onset approach for UXO clearance, the Applicant carried out noise modelling [APP-105]. Based on a maximum charge of 164kg, located at the point of the array closest to North Anglesey Marine SAC, the maximum range TTS-onset range is predicted to be 16km (SPL<sub>peak</sub>) or 3.3km (SEL<sub>SS</sub>). This would not overlap with the North Anglesey Marine SAC and so would not lead to disturbance of animals within the site.

For bottle-nose dolphin, the effect of disturbance from underwater noise from piling and UXO clearance was considered and did not identify LSE from auditory injury. NRW considered that an LSE should be identified from disturbance from vessel traffic but was satisfied that an AEol was unlikely on sites with marine mammal features provided that the mitigation measures outlined by the Applicant are delivered.

NRW's final position, as summarised in its SoCG [REP8-048], was that it considered the mitigation measures described in the RIAA, the MMMP, the Schedule of Mitigation and Monitoring and Marine Licence Principles to be appropriate and adequate. It also confirmed that it considers it unlikely that AEol would arise on SACs designated for marine mammals from the Project alone or in combination with other plans or projects.

The ExA was satisfied that, subject to the delivery of the mitigation measures described in the RIAA, the Schedule of Mitigation and Monitoring, and the Marine Licence Principles document, an AEol of all marine mammal SAC features can be excluded from both the Project alone and in combination with other plans or projects.

### *Post-Examination Environmental Information*

On 11<sup>th</sup> July 2023, the Applicant provided an updated assessment of the in-combination effects which included further environmental information for the Morgan, Mona, and Morecambe OWF projects<sup>8</sup>. The post-examination submission stated that the draft RIAAs for the Mona and Morgan projects could not exclude the potential for in-combination AEol for the harbour porpoise feature of Lleyn Peninsula and the Sarnau SAC and the bottlenose dolphin feature of Cardigan Bay SAC.

Furthermore, the RIAA for Morecambe OWF could not exclude an in-combination AEol for North Anglesey Marine SAC (harbour porpoise), North Channel SAC (harbour porpoise) and West Wales Marine SAC (harbour porpoise) which were screened into the AA for this Project.

The Applicant concluded that the indicative programmes for Mona, Morgan and Morecambe overlap with construction and operational phases of the Awel y Môr Project and it is not possible to rule out an in-combination LSE on marine mammals. However, based upon the commitments by Mona, Morgan, and Morecambe to undertake further assessment and consider mitigation, it is expected that measures will be secured to ensure that an in-combination AEol of protected sites will not arise.

On 14<sup>th</sup> August 2023, the Secretary of State published a letter<sup>9</sup> inviting all interested parties to review the Applicant's updated environmental assessment and provide comments on its adequacy and conclusions.

On 28<sup>th</sup> August 2023, in response to the Secretary of State's letter, NRW stated that they agreed with the Applicant's assessment that an LSE could not be excluded when the Project was considered in-

---

<sup>8</sup> <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010112/EN010112-001779-Combined%20Post%20Examination%20Submissions.pdf>

<sup>9</sup> DESNZ (2013): Letter reference EN010112. Dated 14<sup>th</sup> August 2023.

combination, but it was satisfied that, subject to the delivery of the mitigation measures, an adverse effect on the integrity of the marine mammal SAC features from the Project in-combination with other projects could be excluded.

NRW also confirmed that they were in discussions with the Applicants of the Mona, Morgan and Morecambe OWFs to refine their development proposals and it was their view that these projects should fully consider the cumulative effects of AyM as part of their Examinations, given that AyM is ahead in the consenting process and has concluded its Examination.

On 30<sup>th</sup> August 2023, in response to the Secretary of State's letter JNCC stated that, with regards to North Anglesey Marine SAC they agreed with the Applicant's position that cumulative impacts upon marine mammals from Mona, Morgan or Morecombe are possible due to the overlapping construction timetables, and that Mona OWF has the greatest potential to undermine the conservation objectives for this site.

JNCC highlight underwater noise and vessel activity as the impact pathways mostly likely to result in cumulative impacts and state that it is not possible to rule out the potential for significant cumulative effects with regard Conservation Objective 2 which requires no disturbance to harbour porpoise. JNCC confirmed that a noise management approach is in place to manage disturbance within this site and the additional projects have committed to undertaking further assessment of impacts in their ES. To ensure no significant in-combination effects on this SAC arise, JNCC state that mitigation and management measures must be secured as conditions of the relevant consents. Furthermore, JNCC state that the need for a Site Integrity Plan (SIP) in-combination effects to marine mammals should be reviewed.

On 31st August 2023, in response to the Secretary of State's letter DAERA stated that, with regards to the harbour porpoise feature of The North Channel SAC, there is a potential risk of introducing/ spreading marine invasive non-native species and they recommended that biosecurity/ mitigation measures be established.

The Secretary of State concludes that subject to the delivery of the mitigation measures described in the RIAA, the Schedule of Mitigation and Monitoring, and the Marine Licence Principles document; and that a Site Integrity Plan is in place to effectively mitigate any in combination effects, an AEoI of all marine mammal SAC features can be excluded from both the Project alone and in-combination with other plans or projects. The Secretary of State notes that the mitigation measures would be most appropriately dealt with during the ML process, and as such recommends that NRW consider the implementation of these by the Applicant through the marine licence process.

### 4.6 Sites with Ornithology Qualifying Features

For the majority of the sites with ornithological features, no concerns were raised either by IPs or the ExA in relation to the Applicant's conclusion of no AEoI. However, the RSPB raised concerns in relation to the assessment of effects on the following:

- Grassholm SPA – collision related mortality to gannet population during operation;
- Ailsa Craig SPA – collision related mortality to gannet population during operation; and
- Liverpool Bay SPA – disturbance and displacement for all phases of the Project.

#### 4.6.1 Sites with gannet as qualifying features (Grassholm SPA and Ailsa Craig SPA)

Grassholm SPA is a small island about 18 km west of the mainland coast of south-west Wales. It supports large colonies of breeding seabirds. It is designated for its gannet colony.

The conservation objectives for the site state that the gannet feature will be in a favourable conservation status where all the following conditions are satisfied:



## Awel y Môr Habitats Regulations Assessment

- The population will not fall below 30,000 pairs in three consecutive years;
- It will not drop by more than 25% of the previous year's figures in any one year; and
- There will be no decline in this population significantly greater than any decline in the North Atlantic population as a whole.

Ailsa Craig SPA is an island situated in the outer part of the Firth of Clyde. Cliffs provide nesting sites for a variety of seabirds, notably one of the largest northern gannet colonies in the world. The Ailsa Craig SPA is designated for the following qualifying features:

- Gannet
- Lesser Black-backed Gull
- Kittiwake
- Herring gull
- Guillemot
- Seabird assemblage

The conservation objectives for the site are as follows:

- To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained;
- To ensure for the qualifying species that the following are maintained in the long term:
- Population of the species as a viable component of the site;
- Distribution of the species within site;
- Distribution and extent of habitats supporting the species;
- Structure, function and supporting processes of habitats supporting the species; and
- No significant disturbance of the species.

The Applicant's conclusions of no AEoI of the gannet features of the SPAs was challenged by the RSPB, who raised the following concerns about how the assessment of collision mortality had been applied to the gannet feature of the above sites [RR-024], [REP1-089], [REP1-090], [REP2-058], [REP5-042]:

- It did not agree with the 98.9% avoidance rate used in the Applicant's CRM because this avoidance rate may not accurately capture seasonal variations in gannet behaviour. It considers that 98% avoidance rate is more appropriate for breeding gannets;
- The Applicant's assessment applied a reduction of 60 – 80% to baseline densities in the CRM to account for macro-avoidance of turbines and the evidence supporting this approach is still being assessed by NE and JNCC. It was also concerned that evidence on macro-avoidance by gannets was based on non-breeding birds and may not reflect the behaviour of breeding birds;
- The recent outbreak of Highly Pathogenic Avian Influenza is likely to have a severe impact on seabird populations (an outbreak is ongoing in Grassholm SPA), making them less resilient to any additional mortality from offshore wind farms. It considered that a Population Viability Analysis for gannet should be carried out; and
- The Applicant's assessment did not fully apportioned collision impacts to any of the SPAs within foraging range of the Project or carry out a PVA to determine the implications of the collision-related mortality on the affected SPA populations.

The ExA noted that the Applicant, NRW and the RSPB agreed that the numbers of gannet recorded in site surveys were low, minimising the number of birds at risk of collision-related mortality, and was content that the Applicant had applied appropriate methods for CRM as advised by the ANCBs. It therefore concluded that the breeding population of gannet at Grassholm SPA would not be affected by collision related mortality to an extent that the conservation objective on population sizes would be undermined.

The ExA applied similar reasoning to the gannet feature of Ailsa Craig SPA and concluded that the delivery of the conservation objective to ensure the population of the species as a viable component of the site would not be undermined by the Project.

The ExA concluded that an AEoI on the gannet features of Grassholm and Ailsa Craig SPAs can be excluded from both the Project alone and in combination with other plans or projects.

The Secretary of State agrees with the ExA that an adverse effect on the integrity of the gannet SPA features from the Project alone and in-combination with other plans and projects can be excluded.

### 4.6.2 Sites with red-throated diver as a qualifying feature (Liverpool Bay SPA)

Liverpool Bay SPA is located in the Irish Sea, bordering north-west England and north Wales up to the mean low water mark, forming an arc from near Morecambe Bay to the east coast of Anglesey, and covering an area of c.252,758 ha.

Liverpool Bay SPA was originally classified in 2010 for non-breeding common scoter, non-breeding red-throated diver and its non-breeding waterbird assemblage. In 2017, the SPA was reclassified and breeding and non-breeding little gull, breeding little tern, and breeding common tern were added. As part of the reclassification, the boundary of the SPA was extended to the north and west to support the addition of little gull.

The conservation objectives for red-throated diver are to, subject to natural change, maintain or restore the red-throated diver population, distribution, and its supporting habitats in favourable condition. Specific targets include:

- Abundance: Maintain the size of the non-breeding population at a level which is at or above 1800 individuals (mean peak, 2015, 2018, 2019 & 2020).
- Distribution: Restore the distribution of the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting feature distribution.
- Disturbance from human activity: Minimise the frequency, duration and/or intensity of disturbance affecting the feature so that the population, its distribution within the site, or its use of the habitat is not significantly affected.
- Supporting habitat (food availability and quality of prey): Maintain the distribution, abundance and availability of key food and prey items (e.g., fish) to maintain the population:
- Supporting habitat: extent, distribution, and quality of supporting habitat for the nonbreeding season: Restore the extent, distribution and availability of suitable habitat which supports the feature; preventing further deterioration, and where possible, reduce any existing anthropogenic influences impacting the extent and quality (including water quality).

The 2022 Conservation Advice Package<sup>10</sup> for the site states that red-throated diver will be considered in favourable condition only when each of the following three conditions are met:

- The red-throated diver population shows only non-significant fluctuation around the mean population at the time of classification of the SPA, with due consideration to the potential for natural change;
- Red-throated diver distribution and ability to use the site does not significantly change (subject to natural fluctuations and variation); and
- The extent and distribution of the supporting habitat available to the red throated diver population within the site, including its structure, function and supporting processes, is maintained.

The Applicant's conclusions on AEoI were only challenged in relation to direct disturbance and displacement of red-throated diver, as the Project is adjacent to the SPA. The RSPB considered that the

<sup>10</sup> JNCC, Natural England, NRW (2022): Liverpool Bay / Bae Lerpwl Special Protection Area Conservation Advice Package <https://publications.naturalengland.org.uk/file/4591112403812352>

## Awel y Môr Habitats Regulations Assessment

evidence [REP1-089, REP1-090] suggests that birds are likely to be displaced reducing the functional size of the SPA which is contrary to its conservation objectives [RR-024, REP1-089, REP090].

The Applicant advised that it had been agreed that the observed behaviour of red-throated diver in Liverpool Bay SPA was inconsistent with behaviour seen elsewhere, in that the baseline evidence and monitoring from the surveys undertaken for Gwynt y Môr shows displacement to be more limited than elsewhere [REP1-001, REP2-002, REP5-004]. Further justification to their approach to defining stable age structure was provided in response to a question from the ExA [REP5-004].

NRW advised that it did not fully agree with the Applicants approach to assessing displacement, and that published evidence shows that offshore wind farms cause disturbance and displacement to red-throated divers, although the extent of the disturbance varies based upon seasonal and spatial factors. This may be due to different survey and analytical methods and could affect the robustness of the conclusions [REP5-039]. However, NRW did agree with the overall conclusions of the assessment [REP1-080, REP3-020] despite the Applicants assessment being inconsistent with observations of displacement in other parts of the SPA, for example the monitoring of Burbo Bank which demonstrated large scale displacement.

Analysis of red-throated diver data was undertaken by NRW/JNCC within the Gwynt y Môr offshore wind farm and buffers around the windfarm boundary. This windfarm was selected as it represents a situation analogous to that of the Project in that it is adjacent to, but not within the SPA (unlike Burbo Bank Extension). Pre- and post-construction monitoring at Gwyn y Môr showed the number of birds to have decreased within the windfarm boundary, but to have increased within a 4km buffer zone outside the boundary, with the largest increase within the 2-3km and 3-4km buffers [REP5-039].

NRW acknowledged the limitations of the data but considered it to be the best available dataset to use to undertake an analysis of displacement of red-throated diver within this area, and whilst the Applicant had undertaken different analysis of the data, the conclusions were comparable [REP5-039]. As the results of the analyses were inconsistent with other parts of Liverpool Bay SPA and elsewhere in Europe, comprehensive validation monitoring will be required pre, during and post construction [RR-015, REP1-080, REP5-039, REP8-048].

NRW considered [RR-015, REP1-08, REP8-048] that a vessel management plan would be required to avoid /reduce disturbance and displacement during operation and this could be secured through the marine licence. Assuming that the details of this are secured, then NRW concluded that no AEol would arise either alone or in combination with other plans and projects [RR-015, REP1-080, REP5-039, REP8-048].

The ExA concluded that the distribution of birds within the SPA would not be significantly affected by the Project and an AEol can be excluded for Liverpool Bay SPA for the Project alone or in combination with other plans or projects.

### *Post-Examination Environmental Information*

On 11<sup>th</sup> July 2023, the Applicant provided an updated assessment of the in-combination effects which included new environmental information for the Morgan, Mona, and Morecambe OWF projects<sup>11</sup>. The post-examination submission stated that the draft RIAs for the Mona and Morgan projects highlighted that Mona and Morgan could not exclude an AEol of Liverpool Bay SPA, either alone or in-combination, because they had not considered the most recent conservation advice published in 2022. The Applicant stated that for the Awel y Môr OWF project, NRW had confirmed that the conclusion of no AEol remained valid when the Project was assessed against the updated conservation objectives, and it expected that this would also apply to Mona and Morgan.

<sup>11</sup><https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010112/EN010112-001779-Combined%20Post%20Examination%20Submissions.pdf>

## Awel y Môr Habitats Regulations Assessment

On 14<sup>th</sup> August 2023, the Secretary of State published a letter<sup>12</sup> inviting all interested parties to review the Applicant's updated environmental assessment and provide comments on its adequacy and conclusions.

On 28<sup>th</sup> August 2023, in response to the Secretary of State's letter, NRW<sup>13</sup> did not comment on specific SPAs, but stated that the original cumulative effect assessment for the project concluded that there was no potential for significant cumulative effects on ornithological receptors and it agreed with this conclusion. Furthermore, with regards to the inclusion of the Mona, Morgan and Morecambe OWF projects in the in-combination assessment, NRW stated that they agreed with the Applicant's conclusion of no LSE, and reasserted that it will be for the Mona, Morgan and Morecambe assessments to consider the cumulative effects with the Project as part of their ongoing project refinement.

On 30<sup>th</sup> August 2023, in response to the Secretary of State's letter JNCC<sup>14</sup> stated that with regards to Liverpool Bay SPA clarity is required on how in-combination effects were considered in light of Awel y Môr's contribution and the contribution of other projects, to any potential LSE.

Furthermore, JNCC also stated that the information provided in the PEIR for the Morecambe OWF Project was based on 12 months of survey data which is insufficient and therefore they were not able to provide any advice that differs from advice previously provided on the potential in-combination effects to Liverpool Bay SPA.

The Secretary of State agrees with the ExA that an adverse effect on the integrity of the red-throated diver feature of SPA from the Project alone can be excluded.

With regards to in-combination effects the Secretary of State notes that there is uncertainty about the impacts of the proposed Mona, Morgan and Morecambe OWF projects, because the applications for these projects have not yet been finalised. Whilst these projects have issued PEIRs, the predicted impacts on red-throated divers are subject to change and there is a high level of uncertainty around any assessment which includes these figures. For this reason, the Secretary of State considers that the impacts of displacement on birds should be limited to projects that are operational, under-construction or consented. The Secretary of State also noted NRW advice that these projects will undertake their own assessments in-combination with the Project to inform their consents.

The Secretary of State agrees with NRW that that it will be for the Mona, Morgan and Morecambe assessments to consider the in-combination effects with the Project as part of their applications and has excluded the effects of the Mona, Morgan and Morecambe OWF projects from the in-combination assessment. The Secretary of State agrees with the ExA that an adverse effect on the integrity of the red-throated diver feature of the SPA from the Project in-combination with other projects can be excluded.

<sup>12</sup> DESNZ (2013): Letter reference EN010112. Dated 14<sup>th</sup> August 2023.

<sup>13</sup> Natural Resources Wales (2023): Letter Reference: 20031687. Dated 29<sup>th</sup> August 2023.

<sup>14</sup> JNCC (2023): Letter Reference: OIA-09730. Dated 30<sup>th</sup> August 2023.

## 5 Habitats Regulations Assessment Overall Conclusions

The Secretary of State has carefully considered the information presented before and during the Examination, including the RIAA, RIES, the ES, representations made by IPs, the ExA's report itself, and responses to post-Examination consultation letters. She considers that the Project has the potential to have an LSE on 32 protected sites when considered alone and in-combination with other plans or projects. These sites are:

- Conwy Bay SAC
- Dee Estuary SAC
- River Dee and Bala Lake SAC
- Dee Estuary SPA and Ramsar Site
- Anglesey Terns SPA
- Ribble and Alt Estuary SPA and Ramsar Site
- Aberdaron Coast and Bardsey Island SPA
- Morecambe Bay and Duddon Estuary SPA and Ramsar Site
- Bowland Fells SPA and pSPA
- Copeland Islands SPA
- Skomer Skokholm and the Seas off Pembrokeshire SPA
- Rathlin Island SPA
- Puffin Island SPA
- Layan Sands, Conway Bay SPA
- Dyfi Estuary SPA
- Burry Inlet SPA and Ramsar Site
- Severn Estuary SPA and Ramsar Site
- North Anglesey Marine SAC
- Dynesfeydd Mon Forol SAC
- Ceredigion Bay SAC
- North Channel SAC
- Llyn Peninsular and Sarnau SAC
- West Wales Marine SAC
- Pembrokeshire Marine SAC
- Grassholm SPA
- Ailsa Craig SPA
- Liverpool Bay SPA

The Secretary of State has undertaken an AA in respect of those 32 sites' conservation objectives to determine whether the Project, either alone or in-combination with other plans or projects, will result in an adverse effect on integrity.

Having considered all the information available to her and the mitigation measures secured through the DCO and those which will be managed through the Marine Licence, the Secretary of State has concluded, in line with the recommendation of the ExA and NRW that the Project will not have an adverse effect on the integrity of any protected site.

## 6 Transboundary Assessment

Given the potential for this Project to affect mobile features across a wide geographical area; the Secretary of State believes it important to consider the potential impacts on protected sites in other European Economic Area (EEA) states, known as transboundary sites, in further detail. The ExA also considered the implications for these sites, in the context of looking at the wider EIA considerations. The results of the ExA's considerations and the Secretary of State's own views on this matter are presented below.

In accordance with Regulation 32 of the EIA Regulations, the Inspectorate published a notification in the London Gazette on 29 September 2021 [OD-002] which provided information about the Project and its likely significant effects. The Republic of Ireland and France were also asked whether or they wished to participate in the procedure under PA2008 and Regulation 32 of the EIA Regulations.

A response was received from the Republic of Ireland [OD-001] confirming it wished to participate in the Examination. A response was also received from Meath County Council [AS-039], confirming the Council had no comment to make in respect of the Project.

The Irish Whale and Dolphin Group also responded stating the area for the Project is identified as being important for harbour porpoise, minke whale, bottlenose, common and Risso's dolphins as well as grey seals. Specific concerns related to piling soft starts, scale of mitigation and acoustic deterrent devices in the proposed Marine Mammal Mitigation Plan [AS-040].

A response was also received from France, confirming their participation in the PM as an 'Other Party' and also that Direction interrégionale de la mer Manche Est - mer du Nord (DIRM MEMN) would be participating in the Examination as an IP [OD-020].

DAERA NI confirmed that it is content with the SACs being considered and the assessment and had no further comments.

NE confirmed that it had no concerns in relation to protected sites in England or qualifying features within English waters.

The Isle of Man Government raised concerns about the adequacy of the Applicants ornithological assessment, particularly in relation to the Manx shearwater [RR027] and confirmed that Isle of Man is not covered by the Habitats Regulations, but is part of the Ramsar Convention, with one site (Ballaugh curraghs) listed as a Ramsar site.

The Applicant's transboundary screening process identified 28 sites for assessment [REP8-055]. These sites are listed below, along with the relevant features:

- Rockabill to Dalkey Island SAC (IE) SAC (harbour porpoise);
- Nord Bretagne DH (FR) SAC (harbour porpoise);
- Roaringwater Bay and Islands SAC (IE) SAC (harbour porpoise);
- Récifs et landes de la Hague (FR) SAC (harbour porpoise);
- Anse de Vauville (FR) SAC (harbour porpoise);
- Banc et récifs de Surtainville (FR) SAC (harbour porpoise);
- Blasket Islands SAC (IE) SAC (harbour porpoise);
- Tregor Goëlo (FR) SAC (harbour porpoise);
- Côte de Granit rose-Sept-Iles (FR) SAC (harbour porpoise);
- Mers Celtiques - Talus du golfe de Gascogne (FR) SAC (harbour porpoise);

## Awel y Môr Habitats Regulations Assessment

- Chausey (FR) SAC (harbour porpoise);
- Cap d'Erquy-Cap Fréhel (FR) SAC (harbour porpoise);
- Baie de Morlaix (FR) SAC (harbour porpoise);
- Abers - Côtes des legends (FR) SAC (harbour porpoise);
- Baie du Mont Saint-Michel (FR) SAC (harbour porpoise);
- Baie de Saint-Brieuc – Est (FR) SAC (harbour porpoise);
- Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard (FR) SAC (harbour porpoise);
- Estuaire de la Rance (FR) SAC (harbour porpoise);
- Ouessant-Molène (FR) SAC (harbour porpoise);
- Côtes de Crozon (FR) SACI (harbour porpoise);
- Chaussée de Sein (FR) SAC (harbour porpoise); Lambay Island (IE) SPA (kittiwake, lesser black-backed gull, guillemot, razorbill and puffin);
- Ireland's Eye (IE) SPA (kittiwake, guillemot and razorbill);
- Howth Head Coast (IE) SPA (kittiwake);
- Wicklow Head (IE) SPA (kittiwake);
- Saltee Islands (IE) SPA (kittiwake, lesser black-backed gull and puffin);
- Wexford Harbour and Slobs (IE) SPA (lesser black-backed gull); and
- Helvick Head to Ballyquin (IE) SPA (kittiwake)

The Applicant's assessment concluded that there was no potential for AEol of the conservation objectives of any transboundary site from the Project alone or in-combination, and that subject to natural change, the designated sites will be maintained in the long term [REP8-055].

The Secretary of State has not been presented with any substantive evidence to demonstrate that transboundary impacts would have an AEol on any protected site. As such, the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects would not have an AEol on any transboundary site.