Department for Energy Security & Net Zero

Habitats Regulations Assessment for an Application under the Planning Act 2008

Morecambe Offshore Wind Farm Generation Assets

Regulation 63, 64, and 68 of the Conservation of Habitats and Species Regulations 2017

Regulation 28, 29, and 36 of the Conservation of Offshore Marine Habitats and Species Regulations 2017

01 December 2025

[This page is intentionally left blank]

Contents

List of abbreviations

Term	Abbreviation
Adverse Effect on Integrity	AEoI
Appropriate Assessment	AA
Construction Environmental Management Plan	CEMP
Central Impact Value	CIV
Compensation measure	CM
Deemed Marine Licence	DML
Development Consent Order	DCO
Environmental Statement	ES
European Economic Area	EEA
Examining Authority	ExA
Functionally Linked Land	FLL
Habitat Regulations Assessment	HRA
Interested Parties	IPs
Imperative Reasons of Overriding Public Interest	IROPI
Joint Nature Conservation Committee	JNCC
Lesser Black-Backed Gull	LBBG
Likely Significant Effect	LSE
Marine Management Organisation	MMO
Marine Recovery Fund	MRF
Mean Maximum Plus One Standard Deviation	Mean Max +1SD
Morecambe Bay and Duddon Estuary	MBDE
Nationally Significant Infrastructure Project	NSIP
National Site Network	NSN
Natural England	NE
Natural Resources Wales	NRW
Population Viability Analysis	PVA
Preliminary Environmental Information Report	PEIR
Principal Areas of Disagreement Statement	PADS
Red-Throated Diver	RTD

Report on the Implications for European Sites	RIES
Report to Inform Appropriate Assessment	RIAA
Ribble and Alt Estuaries	RAE
Special Areas of Conservation	SACs
Special Protection Areas	SPAs
Statement of Common Ground	SoCG
Statutory Nature Conservation Body	SNCB
Supplementary Advice on Conservation Objectives	SACO
The Planning Inspectorate	PINS
Upper Confidence Interval	UCI
Wind Turbine Generator	WTG
Zone of Influence	ZoI

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[1] ("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") and Deemed Marine Licences ("DMLs") for the Morecambe Offshore Windfarm Generation Assets (the "Project"). The Examining Authority ("ExA") defines this as the "Proposed Development". It is defined as the "Project" within this HRA for consistency with the terminology of the Habitats Regulations. For the purposes of these Regulations, the Secretary of State is the competent authority.

The Project comprises the construction and operation of up to 35 wind turbine generators ("WTG") accompanied by a network of subsea cables linking the WTGs to up to two offshore substations. The transmission infrastructure is being developed jointly with the Morgan Offshore Windfarm Generation Assets ("Morgan OWF") and is subject to a separate development consent application. That project is known as the Morgan and Morecambe Offshore Wind Farms Transmission Assets Project. It is currently undergoing examination with the examination concluded on 29 October 2025.

The Project constitutes a nationally significant infrastructure project ("NSIP") as defined by s.14(1)(a) of the Planning Act 2008 as it is for an offshore generating station with a capacity over 100 megawatts ("MW").

The Project was accepted by the Planning Inspectorate ("PINS") on 27 June 2024, and three Inspectors were appointed as the Examining Authority ("ExA") for the Application. The Examination of the Project application began on 24 October 2024 and concluded on 23 April 2025. The ExA submitted its report of the Examination, including its recommendation ("the ExA's Report"), to the Secretary of State on 23 July 2025. Numbered references to the ExA's Report are presented in the format "[ER *.*.*]".

This HRA also contains a consideration of the potential effects of the Project upon protected sites in European Economic Area ("EEA") States ("transboundary sites"). This is described in more detail in Section 10.

[1] https://www.legislation.gov.uk/uksi/2017/1012/contents

1.2 Habitats Regulations Assessment

The Habitats Regulations aim to ensure the long-term conservation of certain species and habitats by protecting them from possible adverse effects of plans and projects. In the UK, the Habitats Regulations apply as far as the 12 nautical mile limit of the UK territorial waters.

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 Areas ("SPAs"). SACs and SPAs together, referred to as European sites in legislation, from 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. UK government policy is to afford Ramsar sites in the United Kingdom the same protection as sites within the NSN (collectively referred to in this HRA as "protected sites").

Regulation 63 of the Habitats Regulations 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, 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).

This Project is not directly connected with, or necessary to, the management of a protected site. The Habitats Regulations require that, where the Project is likely to have a significant effect ("LSE") on any such a site, alone or in-combination with other plans and projects, an appropriate assessment ("AA") is carried out to determine whether or not the Project will have an adverse effect on the integrity ("AEoI") of the site in view of that site's conservation objectives. In this document, the following stages are collectively referred to as the HRA:

- Stage 1: Assessment of LSE;
- Stage 2: AA to determine whether there is an AEoI of a protected site;
- Stage 3: Assessment of Alternative Solutions;
- Stage 4: Imperative Reasons of Overriding Public Interest ("IROPI"); and
- Stage 5: Proposed Compensatory Measures.

The Secretary of State has had regard to relevant guidance on the application of the HRA including the PINS (2022) Advice Note 10[2], European Commission guidance[3], as well as joint guidance by DEFRA, Natural England ("NE"), the Welsh Government and Natural Resources Wales (2021) on 'Habitats Regulations Assessment: protecting a European site'[4].

1.3 Site conservation objectives

Where an AA is required in respect of a protected site, Regulation 63(1) of the Habitats Regulations requires that it be an AA of the implications of the plan or project for the site in view of its conservation objectives. Government guidance also recommends that in carrying out the LSE screening, applicants must check if the proposal could have a significant effect on a protected site that could affect its 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[5]. 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 NE. 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 AEoI 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.

NE has issued generic conservation objectives, which should be applied to each interest feature of the site. Supplementary advice on conservation objectives ("SACOs") for each site underpins these generic objectives to provide site-specific information and give greater clarity to what might constitute an adverse effect on a site interest feature. SACOs are subject to availability and are currently being updated on a rolling basis.

Where supplementary advice is not yet available for a site, NE advises that HRAs should use the generic objectives[6] and apply them to the site-specific situation. For SPAs, the overarching

[2] https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-ten/

[3] https://op.europa.eu/en/publication-detail/-/publication/11e4ee91-2a8a-11e9-8d04-01aa75ed71a1

[4] https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site

[5] https://www.gov.uk/guidance/appropriate-assessment

[6] http://publications.naturalengland.org.uk/publication/6734992977690624?cache=1656417868.31

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 Habitats Regulations. 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; and
- 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, SACOs have been used by the Secretary of State to consider whether the Project has the potential to have an AEoI of sites, either alone or in-combination with other plans or projects.

1.4 The Report on the Implications for European Sites and statutory consultation

Under Regulation 63(3) of the Habitats Regulations and Regulation 28(4) of the Offshore Habitats Regulations the competent authority must consult the appropriate Statutory Nature Conservation Body ("SNCB") and have regard to any representation made by that body within such reasonable time as the authority specifies.

NE is the SNCB for England and for English 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 NE following the 2013 Triennial Review of both organisations. However, the 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 NE on the significance of any potential effects on interest features of such sites.

The ExA, with the support of the Planning Inspectorate's Environmental Services Team, produced a Report on the Implications for European Sites ("the RIES") [PD-017]. The purpose of the RIES was to compile, document, and signpost information submitted by the Applicant and IPs during the Examination up to Deadline 5. It was issued to ensure that IPs, including NE as the SNCB under Regulation 5 of the Habitats Regulations, had been formally consulted on Habitats Regulations matters in respect of the Application for the Project during the Examination.

The RIES was published on the PINS NSIP website and the ExA notified IPs that it had been published. Consultation on the RIES was undertaken between 25 March 2025 and 15 April 2025. JNCC [REP6-045], NE [REP6-051], the Royal Society for the Protection of Birds [REP6-054] Natural Resources Wales [REP6-053] and the Crown Estate [REP6-068] provided comments on the RIES.

1.5 Documents referred to in this HRA

This HRA has taken account of, and should be read in conjunction with, the documents produced as part of the Application and Examination, which are available on the PINS NSIP website[7]. This includes, but is not limited to, the following documents in particular:

- the ExA's Report
- the RIES [PD-017]
- Habitats Regulations Assessment Screening Report ("The Screening Report") [REP3-006]
- the Report to Inform Appropriate Assessment ("RIAA") [REP5a-009]
- Habitats Regulations Assessment Without Prejudice Derogation Case (Clean) - Revision 04 (Volume 4) [REP5a-011]
- Outline Compensation Implementation and Monitoring Plan (Clean) - Revision 02 (Volume 4) [REP5a-013]
- the Outline Compensation Implementation and Monitoring Plan – Red Throated Diver [REP5a-049]
- Natural England's Risks and Issues Log Deadline 6 [REP6-052].

Plus, all other information submitted during the Examination and during the Secretary of State's consideration of the Application.

The final Risks and Issues Log from NE was submitted at Deadline 6. Subsequent references to the Risks and Issues Log in this HRA Report are to the final versions, unless otherwise stated. The Risks and Issues Log confirmed that not all matters relating to the HRA were agreed between NE and the Applicant, and that there were HRA matters outstanding between them in respect of the Project.

[7] https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010117

2 Project description

A detailed description of the Project is presented in Chapter 5 of the ES [REP1-022].

The Project comprises the following offshore components:

- Up to 35 offshore WTGs and associated foundations;
- Inter-array cables connecting the WTGs;
- Up to two offshore substations platforms;
- Up to two electricity transmission cables connecting the offshore substation platforms;
- Other offshore infrastructure including scour protection, cable protection measures, moorings and buoys.

The proposed development is located entirely in offshore English waters in the eastern Irish Sea and covers an area of 87km^2 and is anticipated to have an electrical output capacity of 480MW. The site lies approximately 30 kilometres ("km") from the Lancashire coast, 58km from the coastline of the Isle of Man, 37km from the UK/Isle of Man jurisdictional boundary and 50km from the north coast of Wales.

The final design for the Project will not be confirmed until after consent has been granted. Consequently, the Applicant has presented a Rochdale envelope approach whereby the maximum development scenarios are presented and assessed. The Rochdale envelope and the presented Maximum Design Scenarios provide sufficiently flexibility in the finalisation of the design whilst ensuring that the environmental effects of the Project eventually constructed have been properly assessed. The realistic worst-case maximum design scenario is assessed and outlined by the Applicant in its RIAA. The Secretary of State's HRA is based upon the realistic worst-case design scenario of the Project, in accordance with PINS Advice Note 9.

2.1 Changes to the Application during Examination

No formal change requests were made by the Applicant during the course of the Examination.

3 Stage 1: Screening for Likely Significant Effects ("LSEs")

Under Regulation 63 of the Habitats Regulations and Regulation 28 of the Offshore Habitats Regulations, the Secretary of State must consider whether the Project will have an 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.

The protected sites and qualifying features which were considered in the Applicant's assessment of LSE are presented in the Screening Report [REP3-006]. Section 4 of the Screening Report also presents the broad approach undertaken for screening for LSE and the selection process to identifying relevant protected sites and qualifying features.

NE [RR-061] confirmed that the protected sites identified by the Applicant are those relevant to the Project. The protected sites and qualifying features identified by the Applicant were not disputed during the Examination [C.2.5].

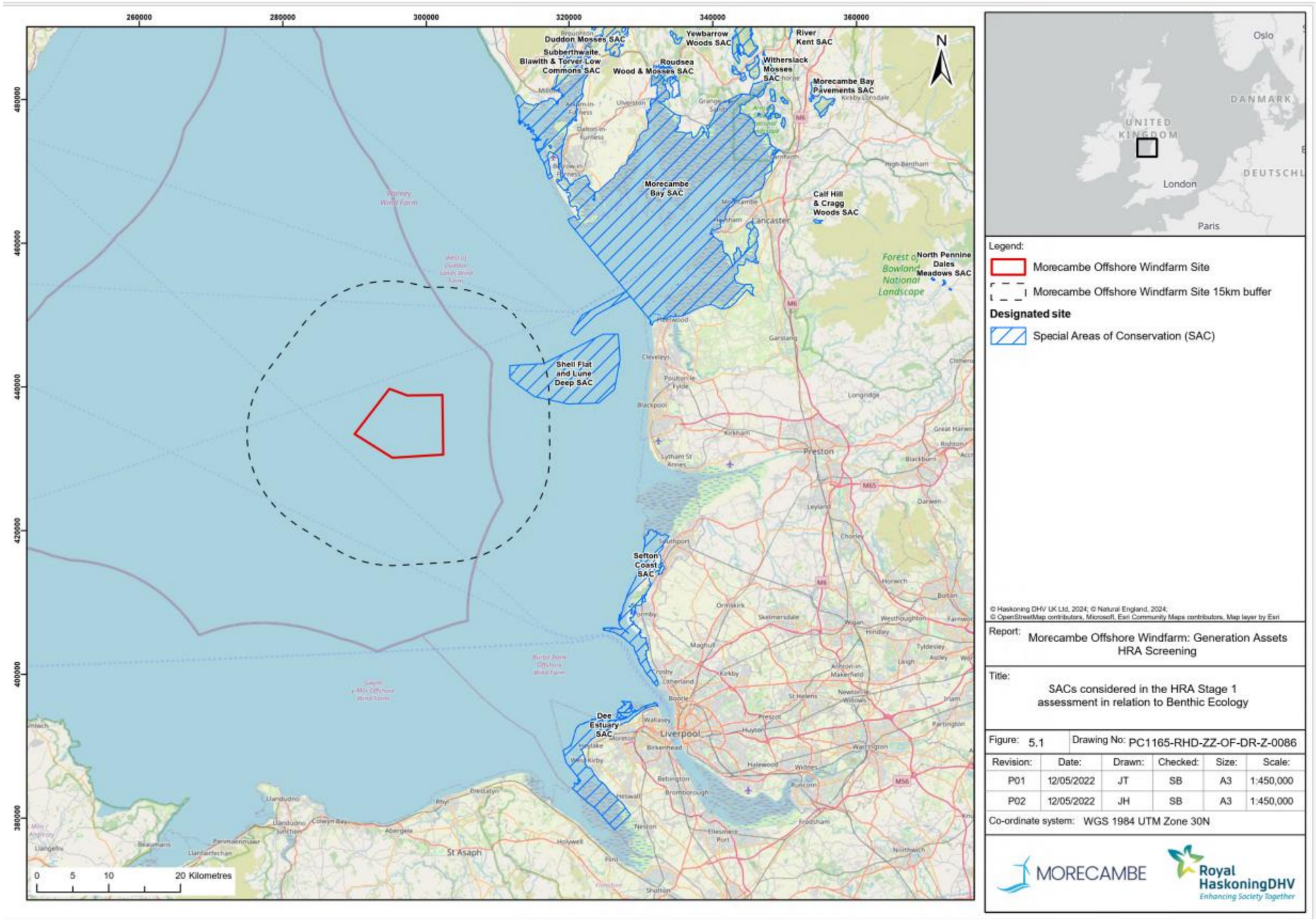

Figure 1: Spatial relationship of the Project and the protected sites related to Benthic habitats and species.

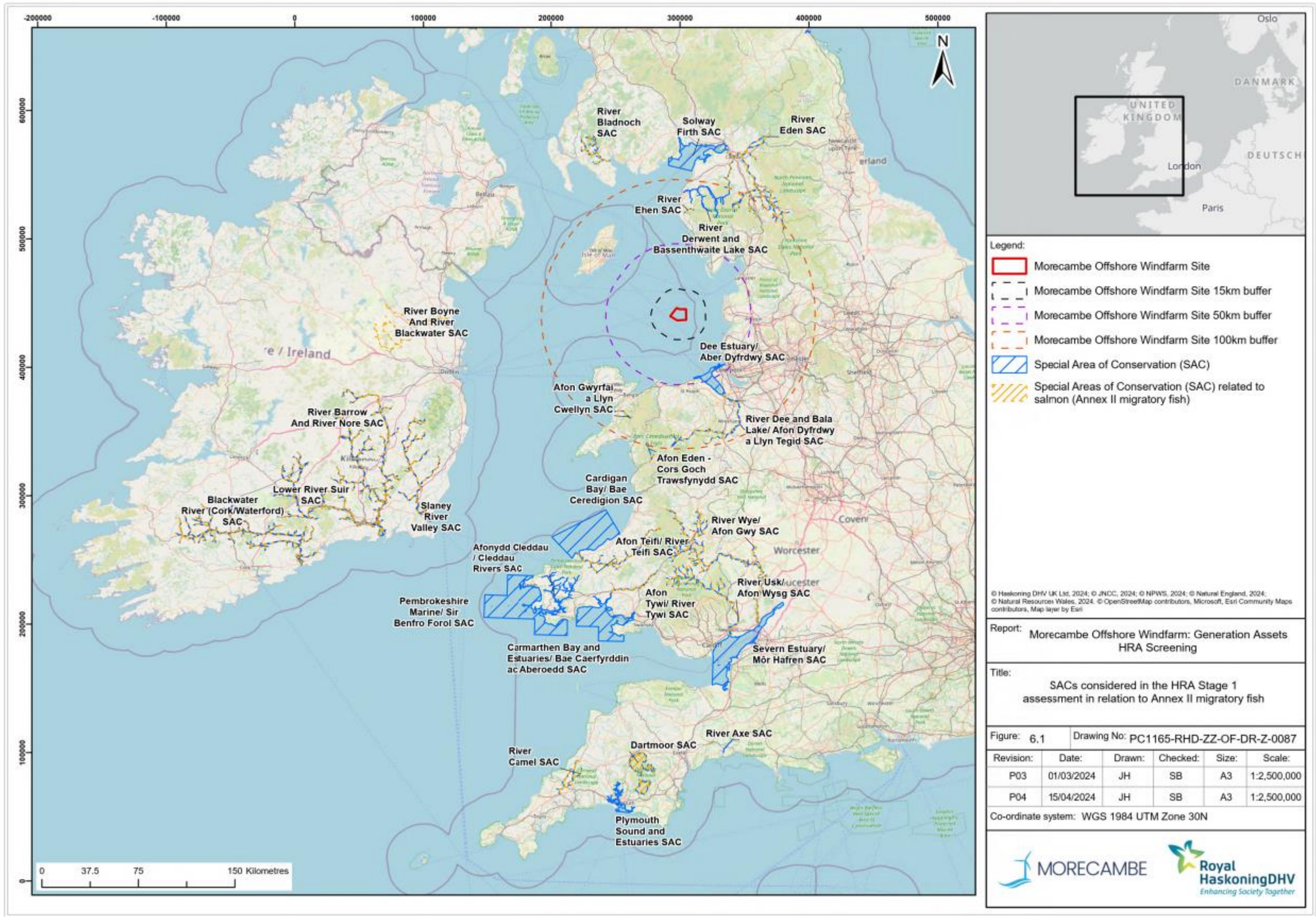

Figure 2: Spatial relationship of the Project and protected sites relating to Annex II migratory fish

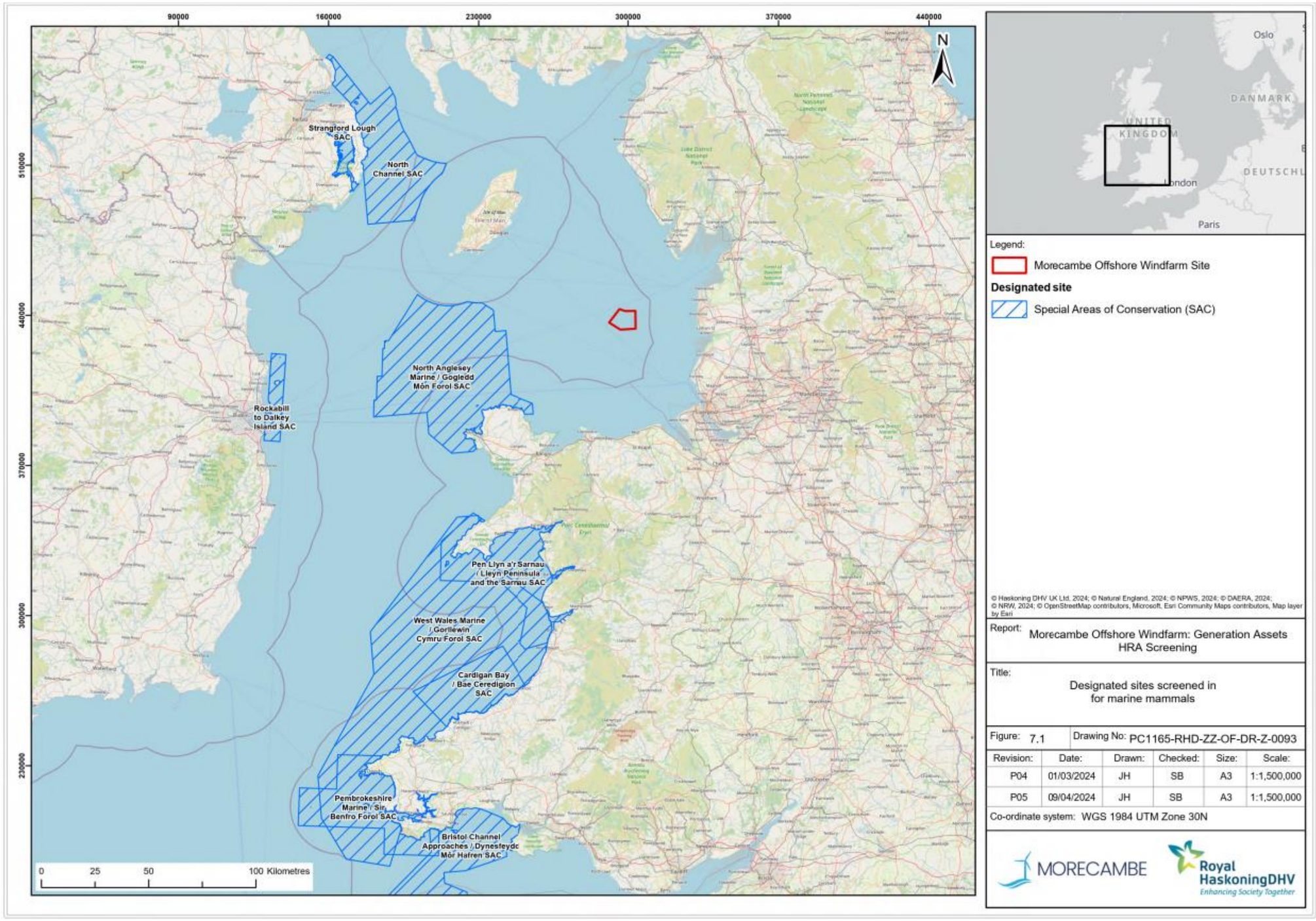

Figure 3: Spatial relationship of the Project and protected sites relating to Marine Mammals

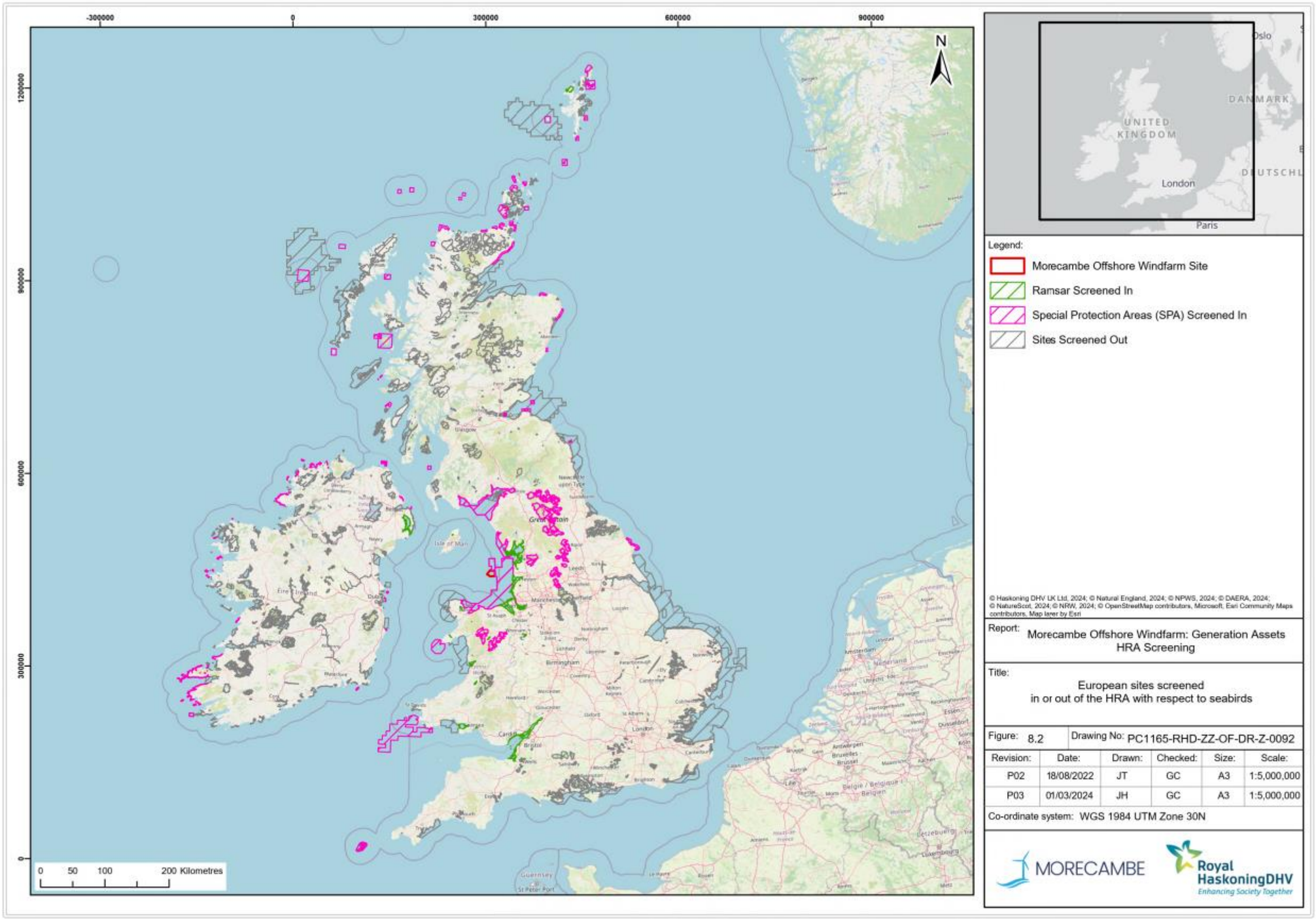

Figure 4: Spatial relationship of the Project and protected sites relating to bird species and supporting habitats.

3.1 Likely Significant Effects alone and in-combination

The Applicant identified the impacts considered to have the potential to result in LSEs, from the Project alone, in Section 4 of the Screening Report [REP3-006].

The following impacts were considered by the Applicant to have the potential to result in LSEs on protected sites during construction, operation and decommissioning of the Project:

- Suspended sediment/deposition
- Re-mobilisation of contaminated sediments
- Introduction of non-native species
- Temporary habitat loss
- Physical disturbance
- Permanent loss of habitat
- Underwater noise and vibration
- Above water noise
- Barries to species movement
- Electro-magnetic field impacts
- Vessel collision risk for mammals
- Changes to water quality
- Collision risk for birds with turbines
- Disturbance and displacement of species

The protected sites affected, and potential impact pathways, are provided in Sections 5-8 of the Screening Report. The potential for alone and in-combination LSE from the Project was identified for the following 86 protected sites:

- Afon Eden – Cors Goch Trawsfynydd SAC
- Afon Gwyrfai a Llyn Cwellyn SAC
- Ailsa Craig SPA
- Anglesey Terns/ Morwenoliaid Ynys Môn SPA
- Bae Ceredigion/ Cardigan Bay SAC
- Berwyn SPA
- Bowland Fells SPA
- Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC
- Buchan Ness to Collieston Coast SPA
- Calf of Eday SPA
- Canna and Sanday SPA
- Cape Wrath SPA
- Copeland Islands SPA

- Copinsay SPA
- Coquet Island SPA
- Dee Estuary/Aber Dyfrdwy SAC
- East Caithness Cliffs SPA
- Fair Isle SPA
- Farne Islands SPA
- Fetlar SPA
- Flamborough and Filey Coast SPA
- Flannan Isles SPA
- Forth Islands SPA
- Foula SPA
- Fowlsheugh SPA
- Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island (ACBI) SPA
- Gogledd Môn Forol/ North Anglesey Marine SAC
- Gorllewin Cymru Forol/ West Wales Marine SAC
- Grassholm SPA
- Handa SPA
- Hermaness, Saxa Vord and Valla Field SPA
- Hoy SPA
- Isles of Scilly SPA
- Larne Lough Ramsar site
- Larne Lough SPA
- Leighton Moss Ramsar site
- Liverpool Bay / Bae Lerpwl SPA
- Martin Mere Ramsar site
- Martin Mere SPA
- Mersey Estuary Ramsar site
- Mersey Estuary SPA
- Mersey Narrows and North Wirral Foreshore Ramsar site
- Mersey Narrows and North Wirral Foreshore SPA
- Migneint-Arenig-Dduallt SPA
- Mingulay and Berneray SPA
- Morecambe Bay and Duddon Estuary Ramsar site
- Morecambe Bay and Duddon Estuary SPA
- North Caithness Cliffs SPA
- North Channel SAC
- North Colonsay and Western Cliffs SPA
- North Pennine Moors SPA
- North Rona and Sula Sgeir SPA
- Noss SPA
- Pen Llŷn a`r Sarnau/ Lleyn Peninsula and the Sarnau SAC

- Rathlin Island SPA
- Ribble and Alt Estuaries Ramsar site
- Ribble and Alt Estuaries SPA
- River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC
- River Derwent and Bassenthwaite Lake SAC
- River Eden SAC
- River Ehen SAC
- Ronas Hill - North Roe and Tingon Ramsar site
- Ronas Hill - North Roe and Tingon SPA
- Rousay SPA
- Rum SPA
- Sgomer, Sgogwm a Moroedd Penfro/ Skomer, Skokholm and the Seas off Pembrokeshire SPA
- Sheep Island SPA
- Shell Flat and Lune Deep SAC
- Shiant Isles SPA
- Sir Benfro Forol/ Pembrokeshire Marine SAC
- Solway Firth SAC
- Solway Firth SPA
- South Pennine Moors Phase 2 SPA
- St Kilda SPA
- Strangford Lough Ramsar site
- Strangford Lough SAC
- Strangford Lough SPA
- Sule Skerry and Sule Stack SPA
- Sumburgh Head SPA
- The Dee Estuary Ramsar site
- The Dee Estuary SPA
- Traeth Lafan/ Lavan Sands, Conway Bay SPA
- Treshnish Isles SPA
- Troup, Pennan and Lion's Heads SPA
- West Westray SPA
- Ynys Seiriol/ Puffin Island SPA

The Applicant also identified the impacts considered to have the potential to result in LSEs from the Project, in-combination with other plans and projects, as detailed in Section 4.4.4 of the Screening Report [REP3-006]. The Applicant considered that where the potential for LSE has been identified alone, then the potential for in-combination effects should also be considered.

In line with PINS guidance[8] on assessing cumulative effects, the Applicant applied a 'tiered' approach to the in-combination assessment to reflect the different levels of uncertainty associated with the project design and timeframes for the projects screened into assessment [REP3-006]. The allocated 'tiers' reflect the current stage of relevant projects within the planning and development process. This allowed the in-combination impact assessment to consider several future development scenarios, each with a different potential for being built out. As described in Section 4.4.4 of the Applicant's Screening Report, the tiers consisted of:

Tier 1:

- *Under construction*
- *Permitted application(s), whether under the Planning Act 2008 or other regimes, but not yet implemented*
- *Submitted application(s) whether under the Planning Act 2008 or other regimes but not yet determined*

Tier 2:

- *Projects on the PIN's Programme of Projects where a Scoping Report has been submitted.*

Tier 3:

- *Projects on the PINS's Programme of Projects where a Scoping Report has not been submitted*
- *Identified in the relevant Development Plan (and emerging Development Plans – with appropriate weight being given as they move closer to adoption) recognising that there will be limited information available on the relevant proposals*
- *Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward*

The projects and plans considered for the in-combination assessment are set out in Table 4.1: Plans and project relevant to the in-combination assessment [REP3-006].

No additional plans or projects were identified by the IPs during the Examination [C.2.28].

The sites for which the Applicant could not exclude LSE from either the Project alone or in-combination with other projects and plans are presented in Appendices 1-4 of the Screening Report [REP3-006].

3.2 Likely Significant Effects conclusion

The Secretary of State has carefully considered the potential effects of the Project on all qualifying features of the protected sites raised during the Examination, taking into account their conservation objectives, to determine whether there will be LSEs in the context of the Habitats

[8] https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-cumulative-effects-assessment#stage-1-establishing-the-long-list-of-other-existing-and-or-approved-development

Regulations. The Secretary of State considers that sufficient information has been provided to inform an assessment in line with his duties under the Habitats Regulations.

NE [RR-061] considered that the correct protected sites and impact pathways had been identified in the Applicant's Screening Report. No matters were raised by any IPs in the Examination in relation to the Applicant's screening for LSE [C.2.15].

The ExA also considered that the correct protected sites and impact pathways had been identified in the Applicant's Screening Report and was satisfied with the approach to the assessment of alone and in-combination LSE [C.2.16]. The ExA agreed that the Project is likely to have a significant effect on the qualifying features of all the protected sites identified by the Applicant when considered alone, or in-combination with other plans or projects [C.2.30].

Based on the information before him, the views of IPs and NE, as well as the recommendations of the ExA, the Secretary of State concludes that LSE from the Project, alone and in-combination with other plans or projects, could occur during construction, operation, and decommissioning of the Project. Table 1 of this document presents the protected sites for which the Secretary of State considers that significant effects cannot be excluded, either alone or in-combination, alongside the qualifying features and relevant impact pathways. The LSE are therefore taken forward to AA for the Secretary of State to consider whether the Project would result in an AEoI of the identified protected sites.

4 Appropriate Assessment methodology

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[9] 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. The focus is therefore specifically on the species and/or habitats for which the protected site is designated.

In line with the requirements of Regulation 63 of the Habitats Regulations and Regulation 28 of the Offshore Habitats Regulations:

"*In considering whether a plan or project will adversely affect the integrity of the site, the competent authority must have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which it proposes that the consent, permission or other authorisation should be given*."

The purpose of this AA is to determine whether an AEoI on the features of the protected sites identified in Table 1 of this HRA, as a result of the Project alone or in-combination with other plans or projects, can be excluded 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 Secretary of State as 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 Secretary of State cannot exclude AEoI of the affected protected sites beyond all reasonable scientific doubt, then he can only agree to a plan or project if it complies with the requirements of Regulation 64 of the Habitats Regulations. Regulation 64 provides that the Secretary of State 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 requires compensatory measures to be secured which maintain the overall coherence of the NSN.

9 https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site

5 Stage 2: Appropriate Assessment

The Secretary of State has undertaken an objective scientific assessment of the implications of the Project on the qualifying features of the protected sites identified in his screening assessment, using the best scientific evidence available. The assessment has been made in light of each site's conservation objectives, as detailed in Section 1.3 and set out in Table 1 of this HRA.

The Applicant's RIAA [REP5a-009] concluded that the Project would not adversely affect the integrity of any of the protected sites and features for which a LSE pathway was identified, either alone or in-combination with other projects or plans.

The Applicant's conclusion of no AEoI was not disputed at the close of the Examination by either the ExA or any IP in respect of the following protected sites:

- Afon Eden – Cors Goch Trawsfynydd SAC
- Afon Gwyrfai a Llyn Cwellyn SAC
- Ailsa Craig SPA
- Anglesey Terns/ Morwenoliaid Ynys Môn SPA
- Berwyn SPA
- Bowland Fells SPA
- Buchan Ness to Collieston Coast SPA
- Calf of Eday SPA
- Canna and Sanday SPA
- Cape Wrath SPA
- Copinsay SPA
- Coquet Island SPA
- Dee Estuary/Aber Dyfrdwy SAC
- East Caithness Cliffs SPA
- Fair Isle SPA
- Farne Islands SPA
- Fetlar SPA
- Flamborough and Filey Coast SPA
- Flannan Isles SPA
- Forth Islands SPA
- Foula SPA
- Fowlsheugh SPA
- Handa SPA
- Hermaness, Saxa Vord and Valla Field SPA
- Hoy SPA
- Larne Lough Ramsar site
- Larne Lough SPA

- Leighton Moss Ramsar site
- Martin Mere Ramsar site
- Martin Mere SPA
- Mersey Estuary Ramsar site
- Mersey Estuary SPA
- Mersey Narrows and North Wirral Foreshore Ramsar site
- Mersey Narrows and North Wirral Foreshore SPA
- Migneint-Arenig-Dduallt SPA
- Mingulay and Berneray SPA
- North Caithness Cliffs SPA
- North Channel SAC
- North Colonsay and Western Cliffs SPA
- North Pennine Moors SPA
- North Rona and Sula Sgeir SPA
- Noss SPA
- Rathlin Island SPA
- River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC
- River Derwent and Bassenthwaite Lake SAC
- River Eden SAC
- River Ehen SAC
- Ronas Hill - North Roe and Tingon Ramsar site
- Ronas Hill - North Roe and Tingon SPA
- Rousay SPA
- Sheep Island SPA
- Shell Flat and Lune Deep SAC
- Shiant Isles SPA
- Solway Firth SAC
- Solway Firth SPA
- South Pennine Moors Phase 2 SPA
- Strangford Lough Ramsar site
- Strangford Lough SAC
- Strangford Lough SPA
- Sule Skerry and Sule Stack SPA
- Sumburgh Head SPA
- The Dee Estuary Ramsar site
- The Dee Estuary SPA
- Traeth Lafan/ Lavan Sands, Conway Bay SPA
- Treshnish Isles SPA
- Troup, Pennan and Lion's Heads SPA
- West Westray SPA
- Ynys Seiriol/ Puffin Island SPA

The ExA was satisfied that on the basis of the information provided in the Applicant's RIAA [REP5a-009] and during the Examination, that an AEoI on all of the above sites and their qualifying features can be excluded [ER C.4.42, C.4.79, C.4.81].

Based on the information before him, and subject to the mitigation measures as secured in the final Order, the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects, will not adversely affect the integrity of the qualifying features of the protected sites listed above.

The Applicant also excluded AEoI alone or in-combination for the following sites and respective qualifying features:

- Bae Ceredigion/ Cardigan Bay SAC
- Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC
- Gogledd Môn Forol/ North Anglesey Marine SAC
- Gorllewin Cymru Forol/ West Wales Marine SAC
- Pen Llŷn a`r Sarnau/ Lleyn Peninsula and the Sarnau SAC
- Sir Benfro Forol/ Pembrokeshire Marine SAC
- Ailsa Craig SPA
- Copeland Islands SPA
- Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island (ACBI) SPA
- Grassholm SPA
- Isles of Scilly SPA
- Liverpool Bay / Bae Lerpwl SPA
- Morecambe Bay and Duddon Estuary Ramsar site
- Morecambe Bay and Duddon Estuary SPA
- Ribble and Alt Estuaries Ramsar site
- Ribble and Alt Estuaries SPA
- Rum SPA
- Sgomer, Sgogwm a Moroedd Penfro/ Skomer, Skokholm and the Seas off Pembrokeshire SPA
- St Kilda SPA

However, several of the Applicant's conclusions of no AEoI in relation to these protected sites and their qualifying features were disputed by IPs and were discussed throughout Examination [ER C.4.82].

5.1 Bae Ceredigion/ Cardigan Bay SAC, Gogledd Môn Forol/ North Anglesey Marine SAC, Gorllewin Cymru Forol/ West Wales Marine SAC, Pen Llŷn a`r Sarnau/ Lleyn Peninsula and the Sarnau SAC, Sir Benfro Forol/ Pembrokeshire Marine SAC- Harbour porpoise, Bottlenose dolphin and grey seal

LSE was identified for these protected sites from permanent threshold shift ("PTS") and disturbance due to underwater noise from piling and other sources, barrier to species movement, vessel interactions, changes to prey resources and changes to water qualifying features. There is an additional impact identified for the seal species, relating to disturbances at haul out sites. The qualifying species for each site is below for clarity:

- Cardigan Bay SAC – bottlenose dolphin and grey seal
- Lleyn Peninsula and the Sarnau SAC – bottlenose dolphin and grey seal
- North Anglesey Marine SAC – harbour porpoise
- Pembrokeshire Marine SAC – grey seal
- West Wales Marine SAC – harbour porpoise

JNCC and NRW raised some concerns through the Examination regarding the quality of the Applicant's assessments and their conclusions reached regarding AEoI on these sites.

NRW did not agree with the conclusion of no AEOI from the Project's in-combination assessment and raised concerns regarding the CEA relating to:

- Assumptions made about construction timescales
- Screening out of underwater noise and effects from shipping
- Aggregate extraction and dredging in the Celtic and Irish Sea (CIS) Management Unit (MU)
- Absence of assessment of additional impact load during operation

In response, the Applicant updated the Marine Mammal Technical Note 2 (HRA) [REP3-062], their RIAA [REP4-009] and their Marine Mammal CEA Screening [REP4-019] to reflect additional information about Irish projects, shipping, OWF maintenance and decommissioning of infrastructure impacts as part of the in-combination assessment. The Applicant notably maintained their conclusion of no AEoI on any Welsh site.

NRW remained concerned that the in-combination assessment was still lacking information to allow the Applicant to conclude no AEoI in relation to PTS and additive effects [REP4-074].

The ExA requested that the Applicant [PD-015] respond to NRW's outstanding concerns. The Applicant [REP5-070] responded stating that they considered the method they used was suitable and was in line with methodologies adopted in other OWF projects. They concluded that a snapshot of the maximum number of animals potentially disturbed at one time allows assessments relative to the reference population, which could be impacted.

NRW [REP5-084] remained unchanged in its opinion regarding the methodology used, however it advised that it could agree with the Applicant's conclusions if the RIAA could be amended to state that the number of animals disturbed were snapshots at a single point in time and that the

conclusions for long-term cumulative population effects from all other impact pathways (except piling) were based on the Applicant's expert judgement.

The Applicant did update the RIAA [REP5-010] to provide clarity on the in-combination assessment and to further cross-reference the updated Marine Mammal chapter of the ES [REP5-012].

NRW confirmed they were content with the amendments made and that they agreed with the Applicant's conclusions of no AEoI for the Welsh sites [REP6-053].

JNCC [REP3-082] also raised similar concerns regarding the methodology used to consider impacts on the North Anglesey Marine SAC, stating that given the distance between the Project and the SAC, it did not anticipate an AEoI but had concerns relating to the information presented within the RIAA relating to disturbance from piling and its in-combination assessment. JNCC requested further information on how the conclusion of no AEoI was reached for the in-combination assessment for piling in respect of the North Anglesey Marine SAC.

As mentioned above, the Applicant did update the RIAA, ES chapter on Marine Mammals and their Technical Note to provide clarity on their methodology and justifications. JNCC confirmed in their response to the ExA's questions [REP6-044] that they were content and confirmed that the Project was unlikely to have an AEoI on the North Anglesey Marine SAC.

Based on the information before him, the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects, will not adversely affect the integrity of Bae Ceredigion/ Cardigan Bay SAC, Gogledd Môn Forol/ North Anglesey Marine SAC, Gorllewin Cymru Forol/ West Wales Marine SAC, Pen Llŷn a`r Sarnau/ Lleyn Peninsula and the Sarnau SAC and Sir Benfro Forol/ Pembrokeshire Marine SAC.

5.2 Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC – Harbour porpoise

During the Examination the impacts on harbour porpoise in the Bristol Channel Approaches SAC were discussed between NE and the Applicant to determine if AEoI could be ruled out.

NE had queries regarding the Cumulative Effect Assessment ("CEA") [APP-068], which was used to inform the Applicant's HRA in-combination assessment. NE were concerned about the methodology used to determine disturbance distance and the number of animals affected and requested updates to the CEA and HRA. NE also requested that the Applicant commit to further mitigation to ensure significant cumulative disturbance does not occur.

The Applicant updated their Marine Mammal Technical Note 2 (HRA) [REP3-062], their RIAA [REP4-009] and their ES [REP4-011] to provide further information on the assessment of PTS in the CEA and to update the in-combination assessments in the HRAs. The Applicant concluded that there would be no AEoI for harbour porpoise for this site.

NE also raised concerns regarding the Applicant's use of a 4km buffer zone in their assessment of impacts of noisy activities (non-piling) but advised that this was unlikely to make a material difference to the decision-making process [REP5-079].

Following the updates to the Applicant's documents, NE advised [REP5-079] that they had no outstanding concerns with the assessment or conclusions for the Bristol Channel Approaches SAC.

Based on the information before him, the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects, will not adversely affect the integrity of the Bristol Channel Approach SAC.

5.3 Copeland Islands SPA, Glannau Aberdaron ac Ynys Enlli/Aberdaron Coast and Bardsey Island SPA, Skomer, Skokholm and the Seas off Pembrokeshire/ Sgomer, Sgogwm a Moroedd Penfro SPA, Rum SPA, Isles of Scilly SPA, St Kilda SPA – Manx shearwater – Collision Risk

RSPB and NRW disputed the Applicant's conclusion of no AEOI for Manx shearwater through the pathway of collision risk arising from the Project.

RSPB stated that this was due to concerns over the use of historical data and methodologies used to model the likelihood of collision was not accurate. They noted that due to the diel variations of the species and the timings of the aerial surveys, data was "unlikely to properly characterise the activity" [RR-073]. Additional concerns were raised regarding the potential for light-induced disorientation by nocturnally active sea birds that would lead to increased collisions. RSPB concluded that they considered it likely that compensation measures would be required for Manx shearwater.

The Applicant responded to these comments [PD1-001] and maintained that their surveys were robust and representative. The Applicant also noted that the assessment did not differentiate between day and night-time activities and therefore displacement figures were not affected by this as a mean peak seasonal abundance was used. They went on to state that studies have shown that the Project site is not of particular importance to foraging Manx shearwater and additionally that published evidence shows that impacts are likely to be higher closer to breeding colonies, which are some distance away from the Project site. In relation to the light-induced disorientation, the Applicant recognised this as a potential issue, but raised that this would most likely affect fledglings (while noting that the Project site is some distance from breeding sites), and noting that the brightest lights were not present on turbines.

RPSB [REP5a-033, REP6-054] at the end of the Examination stated that it remained of a view that it was unable to rule out AEoI for the Manx shearwater qualifying feature of the above sites as a result of the concerns raised about how the baseline was characterised. It noted that this was as a result of an industry wide limitation on data, rather than this being a project-specific issue and it therefore would not be possible to resolve this within the Examination. The RSPB was no longer suggesting that compensation measures would be required at the end of Examination.

Regarding NRW's concerns, they also noted concerns with the baseline assessments, stating that there were inconsistencies in dates the surveys were being undertaken and that this could have implications for the apportionment for the Welsh sites [REP1-099]. However, NRW also agreed that the predicted project-alone impacts from the Project are small (equating to less than

1% of baseline mortality of the respective population) and would not be detectable against background mortality. They therefore could agree that an AEoI could be ruled out for these sites, on the basis that some minor corrections to figures within the Offshore Ornithology Technical Note be undertaken.

The Applicant noted these comments and updated the technical note [REP3-058] to which NRW responded they were content to now conclude no AEoI for the project alone on Manx shearwater [REP4-074].

NRW also had concerns relating to the in-combination assessment, particularly with the Mona and Morgan OWFs, which had higher predicted in-combination impacts [REP-074] and requested the Applicant do further assessment work for these projects.

The Applicant updated the RIAA [REP3-58] as requested and NRW confirmed that they were content to conclude no AEoI alone or in-combination on all Welsh sites for Manx shearwater.

The ExA agreed with the Applicant and NE's conclusion that AEoI on the above-mentioned sites for Manx shearwater could be ruled out, while acknowledging RSPB's concerns about industry wide issues relating to data.

The Secretary of State has reviewed the detailed analysis set out by the Applicant and the representations raised by NE and NRW on Manx shearwater in relation to these sites and considers that the evidence provided is sufficient to support the Applicant's conclusions of no AEoI.

5.4 Grassholm SPA – Gannet

As with Manx shearwater, NRW raised concerns with the baseline assessment that could have implications for apportionment for the Welsh sites. They noted that they had inconsistently assigned months within seasons with overlapping periods present in the assessment between migration and breeding seasons for gannets.

The Applicant [REP2-027] addressed this concern in an updated Offshore Ornithology Technical Note at Deadline 3 [REP3-058].

NRW welcomed the amendments to the note [REP3-058] and went on to conclude that there would be no AEoI from the project alone on the gannet qualifying features but requested that the RIAA be updated before they could make a conclusion on the in-combination assessment [REP4-074].

The Applicant updated the RIAA at Deadline 4 [REP4-009] and NRW confirmed their agreement of no AEoI alone or in-combination on all Welsh sites for gannet [REP6-053].

RSPB [RR-073] also raised concerns in relation to the Applicant's methodology as it does not agree with the application of a 70% macro-avoidance for gannet recommended by NE for the collision risk assessment. However, RSPB acknowledged that the Applicant presented values both with and without application of macro-avoidance, and also that due to the low numbers of gannets recorded it is unlikely that an adverse effect would occur.

The ExA noted that, at the close of Examination, IPs were in agreement with the Applicant of no AEoI on the gannet feature at Grassholm SPA alone or in-combination and no matters were outstanding.

The Secretary of State has reviewed the detailed analysis set out by the Applicant and the representations raised by NE and NRW on gannets in relation to the Grassholm SPA and considers that the evidence provided is sufficient to support the Applicant's conclusions of no AEoI.

5.5 Isle of Scilly SPA – Manx shearwater and GBBG

Manx shearwater

RSPB did dispute the Applicant's conclusion of no AEoI on Manx Shearwater at the Isle of Scilly SPA site on the basis that there was no confidence in the baseline densities and that they had identified an additional pathway of collision risk as a result from light-induced disorientation [RR-073].

The Applicant [PD1-011] responded stating that the approach taken for Manx shearwater and that there was no evidence to suggest that their surveys would result in an underestimate of daytime densities of birds occurring at the project site. They also went on to state that nighttime densities of Manx shearwaters are anticipated to be lower than during the day. The Applicant recognised impacts of lighting as a potential issue but raised this would most likely affect fledglings (while noting that the proposed development site is some distance from breeding sites) and noting that the brightest lights were not present on turbines.

As discussed in Section 5.3 of this document, RSPB had raised concerns relating to the industry wide limitations on data and baseline assessments that are not project specific to this proposed development. Due to this, they maintained their conclusions that AEoI could not be ruled out for Manx shearwater at Isle of Scilly SPA but did not suggest that compensation measures were required.

Great Black Backed Gulls ("GBBG")

RSPB maintained throughout the Examination that AEoI could not be ruled out for GBBG at the Isle of Scilly SPA alone or in-combination. In their RR [RR-073] RSPB explained that GBBG had seen breeding numbers decline, which had been further impacted by Highly Pathogenic Avian Influenza ("HPAI"). The RR went on to state that figures from the proposed Morgan OWF project which it stated concluded a population size at the Isles of Scilly SPA to be circa 97% lower than it would have been without the Morgan OWF project in-combination with other projects.

The Applicant responded to these comments [PD1-011] stating that the predicted mortality would be substantially below one bird per year (0.10), resulting in an increase in background mortality of 0.08%, which would be undetectable against natural variation.

The ExA invited both parties to comment on this outstanding matter when consulting on their RIES, to which RSPB responded stating its position remained unchanged for GBBG but did not provide any further details. RSPB and the Applicant's SoCG [REP5a-033] shows that the disagreement is still outstanding, and notes that part of the reason it cannot be resolved is

RPSB's concerns of industry-wide limitations on data and baseline assessments, as was raised in relation to Manx shearwater.

NE was asked to comment on the Applicant's conclusions of AEoI during the consultation on the RIES and they confirmed they were content with the Applicant's conclusions of no AEoI on GBBG for the Isle of Scilly SPA in response to RIESQ9 [REP6-051].

The ExA agreed with the Applicant and NE's conclusion that AEoI on Isles of Scilly SPA for qualifying features of GBBG and Manx shearwater could be ruled out, while acknowledging RSPB's concerns about industry-wide issues relating to data.

The Secretary of State has reviewed the detailed analysis set out by the Applicant and the representations raised by NE on GBBG and Manx shearwater at the Isle of Scilly and considers that the evidence provided is sufficient to support the Applicant's conclusions and is in line with assessments carried out by other consented OWFs.

5.6 Liverpool Bay/ Bae Lerpwl SPA – little gull (non-breeding), red-throated diver (non-breeding), common scoter and waterbird assemblage (non-breeding)

Red-throated diver

In Section 8.4.2.1 of the RIAA [REP5a-009], the Applicant assessed the potential for an AEoI on the Liverpool Bay SPA due to displacement and barrier effects on non-breeding red-throated diver (RTD) during the operation and maintenance phase of the Project.

Survey data indicated low RTD densities, particularly in zones closest to the Project. A weighted average displacement rate was applied to mean abundance estimates, resulting in predicted annual mortality of 0.35 birds (a 0.08% increase in background mortality) based on the current extended SPA boundary. For the original pre-2017 SPA boundary (designated for RTD), mortality was even lower at 0.02 birds (a 0.01% increase in background mortality).

The effective area of the SPA subject to displacement was estimated at 4.63% (current boundary) and 0.43% (original boundary), accounting for the gradient.

Despite the project-alone conclusion, an in-combination assessment was undertaken for context. Projects screened in included Burbo Bank Extension, West of Duddon Sands, Gwynt y Môr, and Awel y Môr OWFs. Population estimates and mortality were calculated using consistent displacement gradients and density data.

The total in-combination mortality was estimated at 3.55 birds per annum, equating to a 0.85% increase in background mortality — below the 1% threshold for detectable population-level effects. The effective area of SPA impacted in-combination was 30.46% (current boundary) and 23.50% (original boundary), with the Project contributing 4.52% and 0.37% respectively.

The RIAA concluded that, due to precautionary nature of the assessment and low RTD densities in the affected areas, the Project would not result in an AEoI to the Liverpool Bay SPA, either alone or in-combination with other plans or projects.

NE [RR-061] disagreed with the conclusion of no AEoI regarding RTD qualifying feature at Liverpool Bay SPA and stated that "*the project alone will impact red-throated diver distribution over 9.07% of the total SPA and, in particular, 1.24% of the original SPA area, where diver densities were sufficiently high for inclusion within the SPA*".

NE [RR-061] advised that 53.29% of the total SPA boundary and 42.55% of the 'original' SPA boundary would be impacted by in-combination displacement effects. It also noted the Project contributes 8.75% of the total SPA boundary and 1.06% to those in-combination totals respectively, which is slightly smaller than the project-alone impact as parts of the impacted buffer area are closer to other OWFs.

NE [REP1-097] noted the 'restore' conservation objective for feature distribution and therefore advised that efforts are made to mitigate the impacts of the Project with respect to displacement of RTD. It considered this especially critical with respect to the original SPA boundary area and suggested the most effective way to rule out AEoI is to change the red line boundary for the Project or commit to an exclusion zone for structures such that no turbines are located within 10km of the original SPA boundary, as opposed to the proposed 6.5km buffer from the original SPA boundary. (Later on in the Examination, NE put forward another option relating to 'Shell Flat', which is discussed further below.)

The Applicant [EV4-006; EV4-007] observed that the Crown Estate's ("TCE's") Round 4 Plan Level HRA concluded no AEoI and considered that the parameters informing this conclusion were consistent with those used in the Morecambe HRA. The Applicant [REP4-054] further stated that the Secretary of State would need to be satisfied that such a buffer as suggested by NE would actually be effective in appreciably reducing any adverse effects on site integrity. In this context the Applicant considered (referencing [REP1-082]) that no suggested buffer would appreciably reverse effects on RTD, asserting that when Liverpool Bay SPA was designated, the closest part of the area identified for RTD by Webb et al. (2006) is located well beyond 10km from the Project.

In addition, the Applicant [REP1-082] also considered that the following are contributing factors to ruling out AEoI:

- It is unlikely the Project would cause a measurable increase in disturbance as the SPA is subject to existing disturbance from boat and helicopter traffic.
- The Project's impact alone is substantially less than that of the nearby consented Awel y Môr OWF, in which AEoI was ruled out, therefore the same AEoI conclusion is warranted. In addition, the effect is so small it would not contribute to in-combination impacts; even when considered, there would be no measurable increase beyond that assessed for Awel y Môr.
- The Applicant is willing to undertake post-construction validation monitoring to confirm these conclusions.

NE [REP2-037; REP5-077] disagreed with the Applicant's assertion that the area within the original SPA boundary potentially affected by the Project is of low importance to RTDs. It emphasised that the SPA boundary was defined through objective analysis identifying the most important areas for RTDs, and the impacted area was included as part of the 'most suitable territories' for a nationally significant population. NE also highlighted that the Applicant's own

baseline surveys show that there were multiple divers recorded within the impacted area on more than one occasion.

On existing disturbance, NE noted that while helicopter and vessel traffic likely occurred when the SPA was designated and may have caused temporary disturbance, the area was still considered important enough for inclusion. Unlike intermittent effects from vessels, it highlighted that the Project would introduce a permanent displacement impact, therefore reducing habitat availability for RTDs. NE considered it reasonable to assess the Project's displacement effect as significant regardless of current traffic levels.

NE also highlighted that Awel-y-Môr OWF lies entirely within Welsh waters, where NRW and JNCC are the relevant statutory bodies. NE did not participate in that Examination, and advice cannot be assumed to align. NRW/JNCC's position reflected site-specific factors, including a cluster of existing wind farms that have already depressed RTD densities in the southern SPA. This contrasts with the northern SPA in which the Project lies, where only West of Duddon Sands OWF overlaps. NE asserted that it has consistently advised since Burbo Bank Extension that adverse effects on the RTD feature cannot be ruled out in this area. It concluded that the Project would displace RTDs across 18 km² of the SPA, adding to cumulative impacts that already constrain distribution and supporting habitat. Given conservation objectives to restore the feature and prevent further deterioration, NE concluded that if RTDs are displaced from areas of potential supporting habitat, then this effectively reduces the availability of the habitat.

Discussions continued [REP3-090], and NE [REP5-078] noted it could conclude no AEoI for the Project alone but maintained an in-combination AEoI could not be ruled out as the original SPA boundary was within 10km of the design envelope.

The ExA continued to explore mitigation options for RTD to ensure the mitigation hierarchy had been fully considered. Therefore, it sought clarification [PD-018] on the generating capacity stipulated in the Agreement for Lease (AfL) and the implications of reducing turbine numbers to accommodate an exclusion zone (also referred to as a buffer zone) from the affected area of the SPA as advised by NE. TCE [REP5a-074] declined to answer due to commercial confidentiality, but the Applicant [REP5a-057] confirmed that the generating capacity under the AfL is set at 480MW, with a mechanism to reduce this only with TCE's agreement, subject to Minimum Density Requirement (375MW) and Minimum Capacity (360MW).

The Applicant [REP5a-057] confirmed the Project Design Envelope accommodates a range of reasonably foreseeable turbine capacities (35 x 13.5MW to 30 x 16MW) to deliver the 480MW objective. The Applicant provided various buffer zone layout scenarios which incorporated various constraints the Project could potentially be subject to, such as likely marine and aviation buffer zones required to accommodate oil and gas platforms on the west of the site and hypothetical RTD buffer zones on the east. Figures 2.1 and 2.2 of [REP5a-057] showed buffer zones from the 'original' SPA boundary; a 7km buffer results in the loss of 1 WTG, a 10km buffer in the loss of 14 WTGs, whether the site is laid out to accommodate 30 or 35 WTGs. Whereas Figures 2.3 and 2.4 [REP5a-057] showed buffer zones from 'Shell Flat'; a sensitive sandbank habitat located within the Liverpool Bay SPA, characterised by its shallow depths and recognised as a key area for red-throated diver foraging and resting. In both Shell Flat scenarios, a 10km buffer would result in the loss of 1 to 2 WTGs, while a 9km buffer could be accommodated without the loss of any WTGs.

In this context, the Applicant [REP5a-057] set out its view in relation to the HRA 'no alternative solutions' test, noting the need for the test to consider whether an alternative solution can be provided that still meets the project objectives which is less damaging to the SPA. The Applicant argued that it is currently impossible to determine the Project's viability tipping point, as the detailed design and economic parameters of the Project are still several years away from being finalised.

Therefore, the Applicant deemed that any reduction in the site at this stage, such as those detailed in the modelled buffer scenarios relating to the Liverpool Bay SPA, would 'risk achieving' project objective 1 [REP5a-007] and the delivery of 480MW of electricity. It also set out that it would 'jeopardise' project objectives 2 and 3 of delivering significant electricity capacity in the UK and maximising generation capacity at a low cost from viable developable seabed.

For these reasons the Applicant's position was that any additional buffer is not an alternative solution in terms of HRA and the WTG layout as proposed already integrates multiple constraints and that further reductions, such as those required by 7 km to 10 km buffers, would compromise turbine layout flexibility and potentially undermine the delivery of the 480 MW target.

In response and based on Applicant's data, NE [REP6-051] stated that a 10km Shell Flat buffer is the most conservative scenario (i.e. the least impactful) in terms of reductions to the Project site under which AEoI could be ruled out, with 8km and 7.5km buffers from the original SPA also reducing disturbance sufficiently to rule out AEoI, with the added benefit of reducing potential displacement effects to a larger proportion of the original SPA boundary.

At the close of Examination, the ExA [ER C.4.136] noted ongoing progress between NE and the Applicant on mitigation for displacement effects and the provision of buffers, with NE preferring mitigation over compensation. The ExA considered that, provided the development is more than 7.5km from the 'original' SPA boundary, no AEoI on RTD at Liverpool Bay SPA could be concluded.

In addition, the ExA [ER 23.4; ER 23.5] highlighted that the Applicant had only provided an outline of the Project, with no fixed layout beyond a general orientation. It noted the two major constraints shaping the site: the oil and gas field to the west and the Liverpool Bay SPA to the east.

The ExA noted the Applicant's design envelope is intended to accommodate a range of turbine capacities to deliver a 480MW project, but it considered that if all buffers requested by oil and gas interests and NE were applied, the developable area would shrink dramatically, leaving less than a third of the proposed WTGs deliverable. This would clearly prevent the Project's objectives from being met.

To mitigate adverse effects on the Liverpool Bay SPA, the ExA recommended a 7.5km buffer from the original SPA boundary, which would prevent development in the east. This buffer would result in the loss of four turbines, whether the site is laid out to accommodate 30 or 35 WTGs, equating to a loss of 54–64MW capacity, meaning the Project would, again, fall short of its objectives.

The ExA therefore proposed an approach which would potentially allow the constraints on the east and west of the Order Limits to co-exist through relocating the 'lost' turbines in the east of the site to the west of the site, which is currently constrained by oil and gas infrastructure.

The ExA suggested that a 1.9nm enduring aviation buffer zone to oil and gas platforms (which would apply post-2029 for the duration of the Project lifetime) would allow for this relocation and maintain project viability. The ExA noted that an interim 3.76nm aviation buffer to oil and gas platforms could be imposed prior to either the date of decommissioning or the proposed "switchover" date of 1 January 2029. In this scenario most turbines could not be installed without agreement from the oil and gas operators in the interim period, which would potentially delay the Project but would not necessarily jeopardise the Clean Power 2030 Action Plan, given that the expected construction timeline indicated that such a delay would not be material.

Post-Examination, the Secretary of State further explored the potential use of buffer zones in order to satisfy the legal tests under the Habitats Regulations and the requirement to ensure there are no feasible alternative solutions that would be less damaging or avoid damage to the site before proceeding to compensation.

Therefore, the Applicant was asked to update [REP5a-057] and provide clearer and newer figures that incorporate nominal layouts reflecting various aviation buffers on the west with the possible RTD buffers on the east, and to comment upon the potential for relocating turbines from the east to the west in line with the ExA's aforementioned proposal. Lastly, the Applicant was invited to respond substantively to NE's representation [REP6-05] and, crucially, whether any of the proposed buffer scenarios would still deliver the original scheme's objectives.

In response, the Applicant provided a comprehensive update, including revised drawings and a clearer colour scheme to illustrate buffer zones around the Liverpool Bay SPA and the aviation and marine buffers on the west of the site.

Two new figures were introduced, showing the current indicative layout for WTGs. This layout, developed since the close of the Examination, identifies 34 possible turbine locations and a substation. The Applicant highlighted that ground conditions across the site are variable: some locations are highly suitable for WTGs, others present challenges, and some remain untested. The Applicant considered that this underlines the need for flexibility as further geotechnical investigations are completed.

The Applicant was clear that the maximum design envelope of 35 turbines remains crucial, given the evolving nature of the Project and the need to maximise capacity within site constraints and government policy. It argued that additional buffers beyond the current 6.5km from the SPA are not a viable alternative under the HRA 'no alternative solutions' test, as the site is already filled to capacity when all constraints are considered.

Specifically, it concluded that losing turbine positions due to NE's proposed buffers (7.5km or 10km) would, in the Applicant's view, jeopardise the Project's ability to deliver its 480MW objective. It also noted that there is no realistic scope to extend the site boundary to compensate for lost positions, making such buffers technically, legally, and financially unfeasible.

The Applicant also asserted that neither the EIA nor the HRA conclusions would change if the proposed buffer scenarios were adopted. They also noted that, of the two buffer options, a 10km buffer from Shell Flat is less risky for project viability than the 7.5km buffer from the SPA.

Before any agreements were reached regarding oil and gas platform buffer zones on the west of the Order Limits, the Applicant responded to the Secretary of State regarding relocating turbines from the east to the west of the site. The Applicant pointed out that while this is

theoretically possible for a reduced scheme (30-32 turbines), it is not a viable alternative for the full design scenario. Ground conditions in the west are less certain, and the loss of flexibility resulting from a buffer zone on the east of the site would put the Project's objectives at risk under any of the potential oil and gas platform buffer zone scenarios.

After this representation, agreements between the Applicant, Harbour Energy, and Spirit Energy, regarding the oil and gas platform buffer zones on the west were reached and are secured through Protective Provisions (PPs) in the DCO. In summary, Harbour Energy withdrew its objection following inclusion of an aviation buffer zone of 3.76 nm around the Calder and CPC platforms until 1 January 2029, unless decommissioned earlier. Spirit Energy also withdrew its objection after agreeing PPs that include interim 3.72 nm aviation buffers for Calder and CPC platforms, reducing to 1.9 nm (CPC) and 1.5 nm (Calder) by 2031 or upon cessation of operations. PPs for MNZ have also been agreed to enable co-existence.

As noted in Section 4.79 to 4.109 of the Decision Letter, the Secretary of State finds that the above agreements reached between the Applicant and the oil and gas operators are reasonable and provide appropriate safeguards in respect of the oil and gas operations, and he has factored these agreements into his considerations of alternatives.

The Applicant's closing position was that the proposed SPA buffers are not a feasible alternative. It further asserted this in their final representation of 4 November, concluding that any additional buffer beyond the existing 6.5km buffer on the east of the site is not an alternative solution in HRA terms, because the whole of the remaining site is needed to ensure delivery of the Project objectives.

With regard to the implementation of a buffer zone for the SPA, the Secretary of State finds the Applicant's arguments for maintaining flexibility, particularly to enable the full design scenario of 35 turbines, which may be necessary given current design uncertainties, compelling to enable the Project's 480MW objective. Consequently, the Secretary of State considers that any SPA buffer scenario on the east does not present a feasible alternative.

Based on the information before him, the Secretary of State agrees that an AEoI on the RTD feature of the Liverpool Bay SPA from displacement can be excluded from the Project alone.

When assessing whether there is an AEoI in combination with other plans or projects, the Secretary of State considers it helpful to refer to the conservation objectives for Liverpool Bay SPA. For the attribute *"supporting habitat: extent, distribution and quality of supporting habitat for the non-breeding season"*, the current target is to *restore*, which requires preventing further deterioration and, where possible, reducing existing anthropogenic impacts on habitat extent and quality. The conservation advice for this species also identifies offshore wind farms near RTD as a source of disturbance[10].

In this context, the Secretary of State notes that the conservation advice relates to supporting habitat rather than mortality, and that the northern part of the SPA, where the Project is located, represents a significant portion of the original SPA unaffected by OWF disturbance (due to high OWF presence in the southern part of the SPA). As the Project lies within 10 km of this area, which could be used by RTDs, displacement across approximately 18 km² of habitat raises

[10] https://publications.naturalengland.org.uk/publication/3236717?category=3229185

concern given the objective to restore distribution and availability of supporting habitat. The Secretary of State therefore agrees with NE that AEoI could only be excluded beyond reasonable scientific doubt if the Project were more than 10 km from this area (which is approximately 7.5km away from the original SPA boundary).

Therefore, the Secretary of State agrees with NE that with a 6.5km buffer from the original SPA boundary, an AEoI on the RTD feature of the Liverpool Bay SPA from displacement from the Project, in-combination with other plans or projects, cannot be ruled out beyond reasonable scientific doubt. Whilst the Secretary of State recognises the individual contribution of the Project to the overall in-combination is modest, due to the existing high pressure on RTD within the site from other projects and the conservation objectives and status of the RTD feature, he is unable to rule out AEoI due to in-combination impacts.

The Secretary of State considers it is not necessary for the Applicant to undertake post-construction validation monitoring to test HRA impact predictions as he has already reached a conclusion on AEoI so there is no need to confirm the HRA predictions. In addition, the Secretary of State notes that the Applicant will be focussing its monitoring on demonstrating the success of the compensation proposals based on a worst-case impact scenario, which he considers proportionate in this instance.

Little gull, common scoter and waterbird assemblage

The ExA did not dispute the Applicant's conclusion of no AEoI for little gull, common scoter and waterbird assemblage. Based on the information before him, the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects, will not adversely affect the integrity of the little gull, common scoter and waterbird assemblage features of the Liverpool Bay SPA.

5.7 Morecambe Bay and Duddon Estuary SPA and Ramsar – Lesser Black-Backed Gull (breeding and non-breeding) and seabird assemblage (breeding)

In Section 8.5.2.2 of the RIAA [REP5a-009], the Applicant assessed the potential for an AEoI on the Morecambe Bay and Duddon Estuary (MBDE) SPA and Ramsar Site arising from collision risk to breeding and non-breeding lesser black-backed gull (LBBG) and seabird assemblage during the operation and maintenance phase of the Project.

The Applicant [APP-027] undertook collision risk modelling for LBBG belonging to MBDE SPA, which indicated that increases in the existing mortality rate would be significantly below 1%, and therefore are likely to be undetectable against natural variation. Therefore, the Applicant concluded that the predicted collision mortality would not result in an AEoI for the SPA from the Project alone.

On the basis of the conclusions of the project-alone assessment (i.e. very low predicted lesser black-backed gull collision mortality, equating to a small fraction of a bird), the Applicant argued that there would be no measurable contribution by the Project to in-combination effects. Nonetheless, the Applicant undertook a Population Viability Analysis (PVA) for context which

indicated a 1.10% reduction in annual growth rate and a 35.8% reduction in population size over 35 years, compared to 1.08% and 35.2% respectively without the Project—differences considered indistinguishable from natural variation.

Accordingly, the Applicant concluded that there would be no AEoI from the Project alone and in combination with other plans or projects of the MBDE SPA and Ramsar Site.

However, NE [RR-061] disputed the Applicant's conclusions of no AEoI on the LBBG and seabird assemblage (breeding) qualifying features of the MDBE SPA which is discussed in more detail below.

Breeding estimates

In [RR-061; REP2-038], NE considered the Applicant's breeding estimates for LBBG to be outdated and provided revised figures. The Applicant subsequently issued Offshore Ornithology Technical Note 2 (HRA) [REP1-081], incorporating NE's updated data and concluding that the revised figures did not alter the assessment's outcome. The Applicant later confirmed in [REP6-051] that this matter had been resolved and the updated information was reflected in the RIAA.

The Applicant conducted a PVA for the LBBG population [REP1-081], which indicated a 0.90% reduction in annual population growth rate and a 27.75% reduction in population size over 35 years compared to an unimpacted scenario. NE [REP3-090] welcomed the PVA but maintained that, when considering in-combination effects, the results did not meet conservation objectives.

Two scenarios were modelled—one with and one without the Project. NE noted that the South Walney colony within MDBE SPA is recovering due to predator fencing and suggested that the apportioned impact is likely be underestimated. NE argued that as the population increases, so too will the number of LBBGs using the development area, thereby increasing collision risk. As such, NE concluded that AEoI from in-combination collision risk could not be ruled out for the MDBE SPA and Ramsar site.

In response, the Applicant [REP4-058] acknowledged NE's concerns but asserted its position that the project-alone effect was very small and did not result in AEoI. NE [REP4-066] proposed monitoring of LBBG as a result of its view that the current figures are an underestimate. However, it [REP6-038] stated that monitoring for collisions of LBBG at this particular site is likely to be difficult and produce limited useful information. Therefore, it stated it was supportive for the Applicant to pursue strategic work which may present options to contribute to industry wide understanding of effects.

The Applicant's [REP6-038] closing response on this matter confirmed that it has contacted the North West England Gull Project to discuss a potential contribution towards monitoring, however a response has not been received to date. The Applicant also noted it had discussed with NE whether other suitable monitoring schemes, towards which the Project could contribute, are being undertaken or proposed. NE has confirmed that it will update the Applicant should such schemes become available. At this stage, therefore, the Applicant is not able to provide further detail on any such measures but agrees with NE that the approach can be refined post-consent.

At the close of Examination, NE [REP6-052] noted this issue as yellow in its risk and issues log, considering that whilst the proposed monitoring will only be detailed post-consent, in this instance they consider it to be an acceptable level of risk.

AEoI on LBBG

NE [RR-061] raised further concerns regarding the in-combination assessment and the proxy used to apportion impacts from nearby OWFs, including Ormonde, Walney 1 and 2, Walney Extension, and West of Duddon Sands. NE argued that using the Project as a proxy likely underestimated the total in-combination impact on MDBE SPA. NE stated it could not rule out AEoI in-combination for the LBBG qualifying feature [RR-061, REP1-098, REP2-038], and reiterated that the Applicant's PVA showed population reductions.

Disagreement also arose over the application of The Crown Estate's (TCE) Round 4 Plan-Level HRA. NE [REP3-092] and the Applicant [REP3-068] diverged on the relevance of TCE's non-site-specific data. The Applicant argued that TCE's higher mortality predictions supported the RIAA's conclusions. NE [REP3-092] acknowledged that information informing the assessments would be different and therefore the conclusions may not align however highlighted that 'projects must still adhere the requirements of their seabed lease'.

The Applicant [REP4-058] maintained that the project-alone contribution was below the threshold for in-combination effects.

Despite updates to collision impact assessments and resolution of proxy-related issues, NE [REP5-078] maintained that AEoI could not be ruled out, as recorded in the D6 Risks and Issues Log [REP6-052].

The RSPB [RR-073] also concluded that AEoI in-combination could not be ruled out for the LBBG feature of MDBE SPA due to collision mortality. The Applicant responded [PD1-011], asserting that the small project-alone impact would not contribute measurably to in-combination effects. RSPB's representations at D3 and D4 did not specifically reference the LBBG feature at MDBE SPA and Ramsar site, but its SoCG [REP5a-033] and response to the RIES [REP6-054] confirmed its position that AEoI could not be ruled out.

NE [REP6-052] confirmed that this remained a matter of disagreement at the close of Examination. However, NE [REP6-050] acknowledged that the Applicant's proposed in-principle compensation measures could deliver appropriate compensation, provided they are implemented in line with NE's advice.

The ExA noted in the RIES [PD-017] that the Applicant's 'without prejudice' derogation case [APP-029] identified a restore target for the breeding population of LBBG at MBDE SPA and a maintain target for the same feature at RAE SPA. Therefore, the ExA [PD-011, ExQ1HRA17] sought clarification from NE about why supplementary advice on conservation objectives for the RAE SPA applies a more stringent maintain objective of 8,097 breeding pairs of LBBG compared with the citation figure of 4,100 breeding pairs. NE [REP3-092, ExQ1HRA17] advised that the higher abundance is not a short-term fluctuation but a long-term change that better reflects favourable condition. It stated that the revised baseline used by the Applicant is based on an average of the median of 2014, 2015 and 2016 counts.

Given the uncertainty surrounding LBBG population numbers at affected colonies, and the requirement to consider the 'restore' objective, the ExA concluded that the assessment may underestimate impacts. Accordingly, the ExA concluded that AEoI on the LBBG qualifying feature of MDBE SPA and Ramsar site from collision impacts cannot be ruled out, aligning with NE's position.

With regard to monitoring, as detailed in Section 4.48 of the Decision Letter, the Secretary of State notes the practical difficulties of undertaking collision monitoring at the Project and the low likelihood of generating limited useful information. Accordingly, it would be unproductive to impose such a requirement in this instance. However, the Secretary of State recognises the value of strategic monitoring in addressing evidence gaps and informing future impact assessments and is supportive of the Applicant's commitment to ongoing participation in strategic evidence-gathering programmes post-consent [REP6-038].

Based on the information before him, the Secretary of State agrees that an AEoI on the LBBG feature of the MBDE SPA and Ramsar from collision risk can be excluded from the Project alone. However, the Secretary of State agrees with NE and the ExA that an AEoI on the LBBG feature of the MBDE SPA and Ramsar from the Project, in-combination with other plans or projects, cannot be ruled out beyond reasonable scientific doubt. Whilst the Secretary of State recognises the individual contribution of the Project to the overall in-combination is modest, there is reason to predict that the numbers of LBBGs using the Project area is likely to have increased and to continue to increase from when the baseline surveys were carried out, and that therefore the number of birds at risk of collision may increase.

5.8 Ribble and Alt Estuaries SPA and Ramsar site – Lesser Black-Backed Gull (breeding) and seabird assemblage (breeding)

In Section 8.6.3.2 of the RIAA [REP5a-009], the Applicant assessed the potential for an AEoI on the Ribble and Alt Estuaries (RAE) SPA and Ramsar Site due to collision risk to LBBG during the operation and maintenance phase of the Project.

The RIAA [APP-027] included collision estimates presented by biological season, with annual outputs summarised alongside the corresponding increase in baseline mortality. With all colonies included in breeding season apportioning, the annual total of breeding adult lesser black-backed gulls at risk of collision was 0.58, representing a 0.06% increase in baseline mortality. With only coastal sites used, the annual mortality is 0.96, representing a 0.09% increase.

The RIAA concluded that increases in mortality of less than 1% are likely to be undetectable against natural variation. Therefore, no detectable changes in mortality rates would occur from the Project. The confidence in this assessment is high, supported by high-quality evidence and precautionary input parameters.

Given the very low predicted collision mortality from the Project-alone assessment, the RIAA concluded that the Project is not expected to contribute measurably to in-combination effects. Nonetheless, an estimate of in-combination mortality and a PVA were undertaken. The RIAA asserted that the total in-combination mortality was stated as 39.80 birds, increasing background mortality by 3.86%, and under worst-case assumptions the Project would contribute 0.96 birds per annum to that figure.

Based on a breeding population of 8,978 adult birds and background mortality of 1,032 birds per annum, the PVA indicated a 0.51% reduction in annual growth rate and an 18.3% reduction in population size over a 35-year operational period. Without the Project, these values are 0.49%

and 17.9%, respectively, which the Applicant considered within natural variation and indistinguishable from the all-projects scenario.

The RIAA therefore concluded that the Project would not result in an AEoI to the RAE SPA and Ramsar Site, either alone or in-combination with other plans or projects as the contribution from the Project alone is minimal and supported by robust evidence and precautionary modelling assumptions.

NE [RR-061] disagreed with the Applicant and considered that an AEoI could not be ruled out for LBBG at the RAE SPA and Ramsar site, due to in-combination collision impacts. NE highlighted that the Applicant's PVA indicated a significant reduction in both population size and growth rate for LBBG and expressed reservations about the methodology used to apportion impacts.

NE emphasised particular concern for the SPA, citing recent population declines and noting that the majority of the Project's impacts were apportioned to this site. NE asserted that any changes in population should be reflected in the mortality increase calculation, enabling it to advise on project-alone impacts within the context of likely in-combination AEoI.

In response [PD1-011], the Applicant referenced the provision of 'without prejudice' compensation measures within the Outline Compensation Implementation and Monitoring Plan (oCIMP) [APP-030], later updated in [REP5a-013], to be secured in the final DCO should the Secretary of State conclude that AEoI cannot be ruled out.

The ExA [ExQ1HRA2 - REP3-068] requested that the Applicant clarify the relevant mitigation measures identified in the Round 4 Plan-Level HRA, and whether any representations were seeking to revisit previously concluded matters without new evidence. The Applicant [REP3-068] responded that the Round 4 HRA predicted a maximum mortality of 3.1 birds from the Project, without quantifying in-combination mortality. In contrast, the Offshore Ornithology Technical Note 2 (HRA) Rev 02 [Document Reference 9.23] submitted at Deadline 3 predicted 0.69 birds from the Project and 36.82 birds in-combination. The Applicant argued that this demonstrated the Project's contribution was comparable to or less than the plan-level HRA, supporting a conclusion of no AEoI alone or in-combination.

NE [REP3-090] welcomed the PVA for LBBG at the RAE SPA and Ramsar site but concluded that in-combination effects would result in a 0.54% reduction in annual population growth rate and a 17.83% reduction in population size over 35 years, failing to meet conservation objectives. NE appreciated the provision of modelling outputs with and without the proposed development and, due to low population counts at the site, stressed the importance of preventing further deterioration. It therefore maintained that AEoI could not be ruled out in-combination despite agreeing that the Applicant could not mitigate this any further.

At Deadline 4 [REP4-060], the Applicant welcomed NE's comments but maintained its position that there would be no AEoI for LBBG alone or in-combination at the RAE SPA and Ramsar site. The ExA [PD-015, ExQ2HRA1] sought confirmation from NE on whether the Applicant's updates, once incorporated into assessment documents, would support a conclusion of no AEoI. NE responded [REP5-081] that it continued to believe AEoI could not be ruled out in-combination. In its ornithological response [REP5-078], NE reiterated this view but supported the development of a derogation case capable of delivering compensation for LBBG at both MDBE and RAE SPAs and Ramsar sites.

NE [REP6-051], in response to the RIES, maintained its disagreement with the Applicant's conclusion of no AEoI in-combination for LBBG due to collision impacts.

The RSPB [RR-073] also stated it could not conclude no AEoI in-combination for the LBBG feature of the RAE SPA and Ramsar site due to collision mortality. The Applicant [PD1-011] responded that the Project's small alone impacts would not measurably contribute to in-combination effects. While the RSPB's Deadline 3 and 4 submissions did not specifically reference the LBBG feature at RAE SPA and Ramsar site, it later confirmed [REP6-054] that it remained unable to rule out AEoI in-combination.

At the close of Examination, the ExA agreed with NE and the RSPB that AEoI could not be ruled out for the RAE SPA and Ramsar site due to in-combination effects. It cited ongoing uncertainty regarding LBBG numbers at affected colonies and expressed concern that the assessment may underestimate impacts. The ExA also noted its obligation to consider the 'maintain' objective for the site's qualifying feature, aligning with NE's view that the in-combination effect would not meet conservation objectives.

Based on the information before him, the Secretary of State agrees that an AEoI on the LBBG feature of the RAE SPA and Ramsar from collision risk can be excluded from the Project alone. However, the Secretary of State agrees with NE and the ExA that an AEoI on the LBBG feature of the RAE SPA and Ramsar from the Project, in-combination with other plans or projects, cannot be ruled out beyond reasonable scientific doubt. Whilst the Secretary of State recognises the individual contribution of the Project to the overall in-combination is modest, he notes that LBBG gull population at this site is currently well below the target level in the conservation objectives. Therefore, it is important that further deterioration from current levels is avoided.

5.9 Sgomer, Sgogwm a Moroedd Penfro/Skomer, Skokholm and the Seas off Pembrokeshire SPA – Manx shearwater, puffin, LBBG, seabird assemblage

Manx shearwater

Concerns raised by RSPB regarding Manx shearwater for the Skomer, Skokholm and the Seas off Pembrokeshire SPA are identical to those discussed in sections 5.3 and 5.4 in this document and to avoid duplication please refer to those sections to understand the issue.

Puffin

NRW raised a query relating to the seasonal definition for puffins used in the assessment [REP1-099] to which the Applicant responded [REP2-027] by providing clarifications and amending the RIAA (table 8.81). Following this NRW confirmed they were content with the Applicant's methodology and conclusions of no AEoI for this site for puffins alone and in-combination.

LBBG

Both JNCC and NRW had initial disputes with the conclusions drawn for impacts on LBBG at this site, however after the Applicant [REP2-027] updated the assessments within the RIAA

[REP5a-009] both parties were confirmed they agreed with the conclusion of no AEoI [REP6-053, REP6-044].

Based on the information before him, the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects, will not adversely affect the integrity of the Skomer, Skokholm and the Seas off Pembrokeshire SPA.

5.10 Ailsa Craig SPA – Gannet

NatureScot [REP2-039] provided a representation at the start of the Examination stating they agreed with the Applicant's conclusion of no AEoI on all Scottish sites, with the sole exception of gannets at the Ailsa Craig SPA.

This was due to NatureScot not agreeing with the Applicant's choice of displacement and mortality values used in modelling. The Applicant has used displacement values of 60-80% with a 1% mortality whereas NatureScot recommends a 70% displacement value and a 1-3% mortality value.

NatureScot recommended that a species is taken forward for PVA when assessed effects exceed a change to the adult annual survival rate of 0.02 percentage point change. NatureScot, does not accept the 70% macro-avoidance rate for gannet in the breeding season and therefore considers the additional mortality from collision to be higher than reported.

NatureScot does also state that while the modelling does not allow them to conclude no AEoI from the project alone, however they note that not all gannetries were included in the tracking studies and therefore they could not discount that some of the gannets seen in the study area originated from other colonies.

NatureScot concludes by stating that they cannot conclude that 100% of the gannets presented in the study in breeding season originated from the Ailsa Craig SPA and would require a recount of apportioning this species.

As part of the of their representation, NatureScot made it clear that due to lack of capacity, they would not be able to respond to further queries and no further representations were received on this matter.

The ExA concluded that the Applicant's modelling did not demonstrate that an AEoI would arise and whilst they noted Nature Scot's concerns, they considered that the evidence provided by the Applicant provided objective scientific evidence that AEoI could be excluded both from the Project alone and in-combination.

The Secretary of State has also reviewed the Applicant's updated RIAA [REP5-009] and considers that the evidence provided is sufficient to support the Applicant's conclusions and is in line with assessments carried out by other consented OWFs.

5.11 Appropriate Assessment conclusion

As the competent authority under the Habitats Regulations for this Application under the Planning Act 2008, the Secretary of State has undertaken an AA in respect of the conservation objectives of eighty-six protected sites to determine whether the Project, either alone or in-combination with other plans or projects, will result in an AEoI.

The Secretary of State has carefully considered all the information available to him, including the recommendations of the ExA, the advice of NE as the SNCB, the views of all other IPs, and the Applicant's case.

The Secretary of State is satisfied that, given the relative scale and magnitude of the identified effects on the qualifying features of the protected sites and, where relevant, the measures secured in the DCO and DML to avoid or reduce potential adverse effects, there would not be any implications for the achievement of site conservation objectives of the following protected sites and therefore adverse effects on the integrity of these sites can be excluded:

- Bae Ceredigion/ Cardigan Bay SAC
- Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC
- Gogledd Môn Forol/ North Anglesey Marine SAC
- Gorllewin Cymru Forol/ West Wales Marine SAC
- Pen Llŷn a`r Sarnau/ Lleyn Peninsula and the Sarnau SAC
- Sir Benfro Forol/ Pembrokeshire Marine SAC
- Ailsa Craig SPA
- Copeland Islands SPA
- Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island (ACBI) SPA
- Grassholm SPA
- Isles of Scilly SPA
- Rum SPA
- Sgomer, Sgogwm a Moroedd Penfro/ Skomer, Skokholm and the Seas off Pembrokeshire SPA
- St Kilda SPA

However, the Secretary of State agrees with the advice of NE, that an AEoI cannot be ruled out beyond reasonable scientific doubt in relation to:

- Displacement and disturbance of RTD of the Liverpool Bay / Bae Lerpwl SPA in-combination with other plans and projects.
- Collision mortality of LBBG of the Morecambe Bay and Duddon Estuary SPA and Ramsar site, in-combination with other plans or projects.
- Collision mortality of LBBG of the Ribble and Alt Estuaries SPA and Ramsar site, in-combination with other plans or projects.

The Secretary of State has not identified any further mitigation measures that could reasonably be imposed which would avoid or mitigate the potential AEoI identified and has therefore

proceeded to consider the derogation provisions of the Habitats Regulations, as presented in Sections 6 to 9 below.

6 Consideration of case for derogation

Based on the AA, the Secretary of State cannot conclude, beyond all reasonable scientific doubt, the absence of an adverse effect from the Project in-combination with other plans or projects on the integrity of the Liverpool Bay / Bae Lerpwl SPA, Morecambe Bay and Duddon Estuary SPA and Ramsar, and Ribble and Alt Estuaries SPA. The Secretary of State concludes that the Project does not meet the integrity test. The Secretary of State has therefore decided to review the Project in the context of Regulations 64 and 68 of the Habitats Regulations and Regulations 29 and 36 of the Offshore Habitats Regulations to determine whether the Project can be consented.

Regulation 64 allows for the consenting of a project that is required for imperative reasons of overriding public interest (IROPI), even though it would cause a negative AEoI of a protected site. Consent may only be given where no alternative solutions to the project are available which are less damaging to the affected protected site and where Regulation 68 is satisfied. Regulation 68 requires the appropriate authority to secure any necessary compensatory measures to ensure that the overall coherence of the UK NSN is protected. The Secretary of State's consideration of information provided to inform these further tests are presented in subsequent sections of this HRA alongside his conclusions.

This part of the HRA has followed a sequential process whereby:

- alternative solutions to the Project have been considered;
- consideration has been given to whether there are IROPI for the Project to proceed; and
- compensation measures proposed by the Applicant for ensuring that the overall coherence of the UK NSN is protected have been assessed.

7 Consideration of alternatives

The Applicant provided its 'no alternative solutions' case in section 4 of [APP-029], updated in [REP1-014] [REP3-008] [REP5a-011], structured around five stages (or steps):

- step 1 - project need and objectives (section 4.2)
- step 2 - define the potential for harm (section 4.3)
- step 3 - long list of alternative solutions (section 4.4)
- step 4 - feasibility of alternative solutions (section 4.5)
- step 5 - would be a comparison of any feasible alternative solutions but as the applicant did not identify any, this was not required (section 4.6)

The Secretary of State has noted the objectives of the Project and has considered whether these objectives could be met by any feasible alternative solutions with a lesser impact on protected sites.

The Applicant [REP3-004] identified a detailed case for the need of the Project in which it set out the policy landscape, such as NPS-EN1 and NPS-EN3, which presents the compelling and urgent need for offshore wind infrastructure.

The Applicant [REP5a-011; REP5a-046] identified the following four objectives as relevant to the Project, as an offshore wind farm generating assets project:

- **Decarbonisation**: Generate around 480MW of low carbon electricity from an offshore windfarm, in support of the Net Zero by 2050 target and UK Government ambition to deliver 50GW of offshore wind by 2030
- **Security of supply**: Provide significant electricity generation capacity within the UK to support commitments for offshore wind generation and security of supply
- **Affordability**: Maximise generation capacity at low cost to the consumer from viable developable seabed within the constraints of available sites and grid infrastructure
- **Coordination**: Coordinate and coexist with other activities, developers and operators to use previously developed seabed to deliver the Project and its skills, employment and investment benefits in the Local Economic Area.

In this regard the Applicant considered there is a clear and urgent need for the development of the Project since it will help to meet the decarbonisation objective and achieve the UK Government target of Net Zero emissions by 2050. Additionally, offshore wind is expected to produce more than 50GW of electricity by 2030, and the Project is positioned to contribute to this target.

In addition, the Project would also support the objectives on security of energy supply, sustainable development, affordability and coordination set out in the Overarching Energy NPS EN-1. With a planned generation capacity of around 480MW of renewable energy, the Project would make a substantial contribution to the achievement of national renewable energy targets, towards Net Zero and to the UK's contribution to global efforts to reduce the effects of climate change.

Lastly, the Applicant [REP5a-011] asserts that the Project would provide secure, reliable and affordable renewable energy supply in the UK for over 500,000 homes. The Project would help the UK meet its Net Zero targets and significantly contribute to the economy, by providing substantial investment locally and nationally, as well as employment and new energy infrastructure during all phases of the Project. This would enhance the sustainable development of the local community.

The Secretary of State has taken into account the above objectives set out by the Applicant above in his consideration of alternatives.

In his consideration of alternatives, the Secretary of State has not constrained himself solely to those alternatives that could be delivered by the Applicant. Nevertheless, the Secretary of State acknowledges that any alternative must be economically feasible for a developer and allow that developer to fulfil the terms of its lease with The Crown Estate.

Alternatives to the Project considered by the Secretary of State are consequently limited either to 'do nothing' or to alternative offshore wind farm projects.

Alternative types of offshore wind farm projects considered are:

- Offshore wind farms not in the UK Exclusive Economic Zone (EEZ);
- Offshore wind farms within the UK EEZ; and
- Feasible alternative design parameters of the Project.

7.1 Define the potential for harm

The Applicant summarised its conclusions on the predicted harm of the Project referring to the RIAA [REP5a-009], with further information in section 4.3 of [REP5a-011] and section 1.5 of [REP5a-046]. The Applicant considered the scale of impacts on the SPAs and Ramsar sites to be as set out in Table 1.

Table 1: Applicant's assessment of Scale of impacts on the European sites with RTD and LBBG qualifying features

Applicant's assessment of Scale of impacts on the European sites with LBBG qualifying features Qualifying feature	Effects from the Project alone	In-combination effects
MBDE SPA and Ramsar site		

LBBG	Predicted increase in mortality from collision of 0.33% (increasing the existing mortality by 0.16%)	Predicted increase in mortality from collision of 22.52 birds, increasing the background mortality by 11.52%, of which the contribution from the Project is less than one bird (less than 1% increase)
RAE SPA and Ramsar site		
LBBG	Predicted increase in mortality from collision of 0.69% (increasing the existing mortality by 0.13%)	Predicted increase in mortality from collision of 36.82 birds, increasing the background mortality by 6.90%, of which the contribution from the Project is less than one bird (0.1% increase)
Liverpool Bay SPA		

RTD	• **Displacement**: Up to two birds per year may be displaced within the original SPA boundary.
	• **Mortality**: Estimated at 0.02 birds per year, based on a cautious assumption that 1% of displaced birds die.
	• **Impact on Population**: This would increase the natural mortality rate by just 0.01%, assuming a population of 1,800 birds and a background mortality rate of 23.3%.
	• **Area Affected**:
	  ○ 21.2 km²
	  ○ If a displacement gradient (effect reduces with distance) is applied: 7.25
		• **Displacement**: Up to 355 birds across all windfarms.
		• **Mortality**: Estimated at 3.55 birds per year, increasing background mortality by 0.85%.
		• **Area Affected**:
		  ○ 725 km² (42.55% of the original SPA)
		  ○ Project's contribution: 17.99 km² (reduced from 21.2 km² due to overlap with existing windfarms)
		  ○ With displacement gradient: 400 km² (23.5% of the SPA)

	km² (0.43% of the SPA) NE [RR-061] considers the original SPA boundary most relevant for assessing impacts on red-throated divers.	

Regarding RTD, as noted in Section 5.6 above, NE's [RR-061] main concern isn't the mortality figures, but rather the distribution of the birds (how much of their habitat is being disturbed). The Secretary of State agrees with NE, noting that the conservation advice relates to supporting habitat rather than mortality. As the Project lies within 10 km of this area, which could be used by RTDs, displacement across approximately 18 km² of habitat raises concern given the objective to restore distribution and availability of supporting habitat.

7.2 'Do Nothing'

The Applicant [REP5a-011] acknowledges the "do nothing" option, as referenced in Defra's 2021[11] compensatory measures guidance, which advises that this alternative should be considered in assessments. However, the Applicant claims that that while the "do-nothing" scenario can serve as a useful baseline for comparing public benefits and alternatives, it is only likely to be viable where there is little or no tangible public benefit from the proposed activity.

The Applicant states that the "do nothing" scenario would prevent the Project from contributing to a range of Government legislation and policy that promotes the development of offshore windfarms. The Applicant highlights the significant challenges in meeting the 50GW target by 2030 and Net Zero by 2050, emphasising the urgency and importance of new offshore wind projects.

The Applicant refers to the Round 4 Plan-Level HRA (TCE, 2022), which considers and rules out the "do nothing" scenario. According to their submission, this alternative would fail to meet the objectives of the Round 4 Plan and would undermine the UK Government's ability to achieve its targets for offshore wind—specifically, the ambition for 50GW by 2030, for over half of renewable generation capacity to come from wind, and for a 78% reduction in greenhouse gas emissions by 2035.The Applicant points out that Round 4 projects are expected to deliver at least 8GW of offshore wind power in England and Wales, contributing to the national targets.

In conclusion, the Applicant asserts that, given the urgent need for the Project and the national policy context, the alternative of not developing the Project would not satisfy the project

[11] https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site

objectives or the requirements of NPS EN-1. As such, the “do nothing” scenario is not considered further in their assessment.

The Secretary of State agrees that a compelling need in the public interest for the Project is clearly established and the ‘do nothing’ option is not a feasible alternative solution as it would fail to meet any of the aims and objectives of the Project in meeting such compelling need.

7.3 Offshore wind farms not in UK EEZ

The Secretary of State considers that offshore wind farm projects which are located outside of UK territorial waters are not an alternative to the Project as this would not meet the objective to support decarbonisation and security of the UK’s energy supply.

Although the UK is party to international treaties and conventions in relation to climate change and renewable energy, according to the principle of subsidiarity and its legally binding commitments under those treaties and conventions, the UK has its own specific legal obligations and targets in relation to carbon emission reductions and renewable energy generation. International and EU countries similarly have their own (different) binding targets and sites outside of the UK EEZ are therefore required for other countries to achieve their own respective targets in respect of climate change and renewable energy.

7.4 Offshore wind farms within the UK

Within the UK, all offshore wind farms are required to secure an Agreement for Lease from the Crown Estate or Crown Estate Scotland. The Crown Estate / Crown Estate Scotland identify suitable locations for offshore wind through leasing rounds informed by HRA and Strategic Environmental Assessment.

The Applicant [REP5a-011] notes that the Project was one of six selected by TCE in Offshore Wind Leasing Round 4 (2021), following a plan-level HRA which determined the Project would be awarded an AfL. The site selection process was influenced by key criteria set by TCE, with areas of seabed offered being identified as the least constrained and most technically favourable for offshore wind development, based on extensive spatial analysis and stakeholder engagement.

The Applicant refers to the ES, which details the process leading to the identification of the Project location and the Round 4 selection. They emphasise that the Project is defined as critical national priority infrastructure, for which multiple locations are needed. Given the constraints of the leasing process and the need to safely co-exist with existing sea users, the Applicant considers there are no feasible alternative locations that would meet the Project’s objectives and satisfy the requirements of NPS EN-1.

The Applicant therefore considers that it is precluded from the use of sites which have not been identified through the leasing rounds, and states that reliance on other alternative offshore wind

farms already identified within the various leasing rounds would not deliver the objectives of the Project.

Furthermore, the Applicant asserts that, in line with NPS EN-1, achieving decarbonisation of the power sector by 2035 requires a substantial number of deliverable locations for offshore wind infrastructure, with each location maximising its generation capacity. It cites policy guidance stating that the existence of other potential plans or projects in different locations is unlikely to be considered a genuine alternative solution, particularly if those alternatives would result in significantly lower generation capacity.

The Applicant refers to the 2024 DEFRA consultation, which reiterates that meeting Net Zero and delivering energy security necessitates a significant number of deliverable sites for offshore wind infrastructure. It states that, starting from the position that alternative plans or projects, or alternative ways of developing the Project that would result in lower capacity, are unlikely to meet national objectives and therefore are not considered viable alternatives.

In summary, the Applicant maintains that, due to policy requirements, technical constraints, and the outcomes of the leasing and assessment processes, alternative locations or solutions are not considered feasible, and the selected site is justified as the most appropriate for meeting national energy and decarbonisation objectives.

The Secretary of State agrees that a compelling need in the public interest for the Project is clearly established, and the use of alternative locations or the repowering of existing offshore wind farms would fail to meet the aims and objectives of the Project. The Secretary of State agrees that the Project is CNP Infrastructure, as defined in NPS EN-1, and that the potential for plans or projects to be delivered in different locations does not constitute an alternative for bringing forward the Project.

7.5 Alternative designs - LBBG and RTD

Other potential alternative solutions reviewed by the Applicant [REP5a-011] relate to the design and operation of the Project. In this regard consideration was given to the scale and size of Project, including deploying fewer WTGs to reduce collision risk for LBBG and considering smaller or alternative site areas to increase distance from RTDs in the Liverpool Bay SPA . However, it states that, given the clarification in the NPS EN-1 2024, reducing capacity is not considered a viable alternative that would meet the Project's objectives. The Applicant asserts that the maximum number of projects and full capacity are required to achieve Net Zero and the 50GW by 2030 target.

The Applicant reports that options such as smaller WTG rotors and increased air gap to reduce collision risk were assessed. It claims that using smaller rotors would either reduce project capacity—limiting its contribution to Net Zero and national targets—or require more WTGs and a larger site area, increasing potential ornithological impacts. Thus, this scenario was not considered further.

For increased air gap, the Applicant states that the minimum clearance between rotor blades and sea surface was increased from 22m to 25m above HAT in response to consultation feedback. While it is theoretically feasible to increase the air gap further, the Applicant states

that this would introduce substantial risks to deliverability, including increased foundation size and weight, reduced availability of suitable installation vessels, and potential need to change foundation type. It considers that these risks threaten the Project's ability to meet its objectives and timeframes. Furthermore, it cites technical evidence and NE's [REP5-083] agreement that increasing the air gap beyond 25m would only result in a negligible reduction in collision risk for LBBG, with no measurable population-level benefit.

The Applicant notes that, following stakeholder feedback, the windfarm site array area was reduced during the pre-application stage from 125km² to 87km² to facilitate co-existence with other marine users. As a result, the maximum number of WTGs was also reduced from 40 to 35 (smallest WTGs) or 30 (largest WTGs). They state that, whilst having the potential to provide mitigation to both RTD and LBBG, any further reduction in scale would not meet the project objectives, and therefore, this alternative is not considered further.

The Applicant also considers alternative methods and timing. It states that, as the relevant effects relate to operation, no alternative methods are available beyond those already considered. For timing, they note that operational restrictions (e.g., seasonal limits) would reduce the project's ability to generate and export low-carbon electricity, and thus would not satisfy project objectives or national policy.

In summary, the Applicant contends that further reductions in scale, alternative designs such as smaller rotors or increased air gap, alternative methods, and alternative timing are either not feasible, not effective, or would not meet the project's objectives and policy requirements. As such, these alternatives are not considered further.

7.5.1 ExA position on alternative designs for LBBG

With regard to LBBG of the MBDE SPA and Ramsar site and RAE SPA and Ramsar site, the ExA [ER C.5.19] was satisfied that no alternative locations or sites exist for the Project that would represent a feasible alternative solution. It further considered that a compelling need for the Project has been established, and that no alternative design parameters are known to be implementable that would constitute a feasible alternative solution; as such, the alternatives assessed would not deliver appreciable benefits in terms of adverse effects on the European sites.

7.5.2 ExA position on alternative designs for RTD

As noted in Section 5.6, at the end of the Examination, NE [REP6-051] considered that alternative design options were available deemed sufficient to rule out an AEoI on RTD of Liverpool Bay SPA, specifically through the implementation of either a 10km Shell Flat buffer or 8km or 7.5km buffers from the original SPA.

To fully consider alternatives and mitigation, the ExA [ER C.5.28] requested comments on how many turbines could be removed from the array, thus increasing the buffer from the original SPA boundary. The Applicant responded [REP5a-058] that it is not possible to know the tipping point in terms of viability of the Project as it is some years away from detailed design and economics being known. The Applicant deemed that any reduction in the site at this stage would risk achieving Objective 1 (480MW delivery) and jeopardise Objectives 2 and 3 (UK electricity capacity and low-cost generation).

At the close of Examination, the ExA [ER C.5.37] noted that, based on the information submitted by the Applicant and IPs, it was not satisfied that all alternative design parameters had been fully explored. The ExA concluded that there remains potential to modify the layout and/or reduce the number of turbines to facilitate a buffer zone that could address the concerns raised by IPs.

Accordingly, based on the ExA's [ER C.4.138] recommendation, the Secretary of State explored the potential for implementing these buffer zones to ensure that the consideration of alternatives had been fully addressed. As detailed in Section 5.6, the outcome of this consultation leads the Secretary of State to find the Applicant's arguments for maintaining design flexibility, particularly to enable the full design scenario of 35 turbines, which may be necessary given current design uncertainties, compelling in order to achieve the Project's 480MW objective. Consequently, the Secretary of State concludes that the implementation of any additional SPA buffer scenario to the east does not present a feasible alternative solution.

7.6 Conclusion

Following further consultation as detailed above, a review of the information submitted by the Applicant, and having identified the objectives of the Project and considered all alternative solutions to fulfil these objectives, the Secretary of State is satisfied that no feasible alternative solutions are available that would meet the Project objectives with an appreciable reduction in predicted impacts on protected sites. The Secretary of States further notes in this regard the policy in NPS EN-1 on Critical National Priority ("CNP") Infrastructure. The Project is nationally significant low-carbon energy infrastructure, and therefore relevant CNP policy is applicable. The Secretary of State is satisfied that the policy requirements in EN-1 paragraphs 4.2.10-13 have been complied with in relation to HRA impacts. In relation to alternatives, EN-1 paragraph 4.2.21 states that the fact that there are other potential plans or projects deliverable in different locations to meet the need for CNP Infrastructure is unlikely to be treated as an alternative solution. Further, that the existence of another way of developing the proposed plan or project which results in a significantly lower generation capacity is unlikely to meet the objectives and therefore be treated as an alternative solution. The Secretary of State notes that this conclusion does not preclude further design refinements being made following the completion of further site investigations in the post-consent stage.

8 Imperative Reasons of Overriding Public Interest

The Applicant's IROPI cases for LBBG and RTD qualifying features were presented in [APP-029, section 5], updated in [REP1-014] [REP3-008] [REP5a-011], and [REP3-064, section 5], updated in [REP5-054] [REP5a-046] respectively. The Applicant concluded that there is a demonstrable overriding public interest in the Project and the policy objectives it will serve, which outweighs the minimal risk and contribution of the Project to AEoI on designated sites.

The HRA derogation provisions provide that a project having an AEoI on a protected site may proceed (subject to a positive conclusion in respect of alternatives and the provision of any necessary compensation) if there are IROPI. This section of the HRA determines whether there are IROPI for the Project to proceed.

The parameters of IROPI are explored in relevant guidance, including the 2021 joint DEFRA HRA guidance[4] and the European Commission guidance (2018)[3], which identify the following principles:

- **Imperative** – urgency and importance: There would usually be urgency to the objective(s), and it must be considered "indispensable" or "essential" (i.e. imperative). In practical items, this can be evidenced where the objective falls within a framework for one or more of the following;
    - (i) actions or policies aiming to protect fundamental values for citizens' life (health, safety, environment);
    - (ii) fundamental policies for the State and the Society; or
    - (iii) activities of an economic or social nature, fulfilling specific obligations of public service.
- **Public Interest**: The interest must be a public rather than a solely private interest (although a private interest can coincide with delivery of a public objective).
- **Long-Term**: The interest would generally be long-term; short-term interests are unlikely to be regarded as overriding because the conservation objectives of protected sites are long-term interests
- **Overriding**: The imperative need in the public interest of the development must outweigh the harm, or risk of harm, to the integrity of the protected site which is predicted by the AA.

The HRA derogations identify certain in-principle grounds of IROPI that may be advanced in favour of such a project. Where the site concerned hosts a priority natural habitat or a priority species, grounds for IROPI should include human health, public safety, or beneficial consequences of primary importance to the environment but otherwise may also be of a social or economic nature, in accordance with DEFRA's joint guidance[3].

8.1 The National Policy Statements (NPSs)

The Project is considered against the 2024 NPSs, as those were in force at the time the application was accepted for Examination. The overarching NPS for Energy (NPS EN-1) sets out national policy for energy infrastructure in Great Britain. It has effect, in-combination with the relevant technology-specific NPS, in respect of recommendations made by PINS to the Secretary of State on applications for energy developments that fall within the scope of the NPSs. These provide the primary basis for decisions by the Secretary of State on National Energy Infrastructure.

The NPSs set out a case for the need and urgency for new energy infrastructure to be consented and built with the objective of supporting the Government's policies on sustainable development, in particular by:

- mitigating and adapting to climate change; and
- contributing to a secure, diverse, and affordable energy supply.

The 2024 NPS for renewable energy infrastructure (NPS EN-3) covers those technologies which, at the time of publication in 2024, were technically viable at generation capacities of over 50 MW onshore and 100 MW offshore. This includes offshore wind and as such the need for this technology is fully covered by the NPSs.

The Secretary of State is of the view that the NPSs clearly set out the specific planning policies which the Government believes both respect the principles of sustainable development and can facilitate the consenting of energy infrastructure on the scale and of the kinds necessary to help us maintain, safe, secure, affordable, and low-carbon supplies of energy.

The 2024 NPSs set out the national case and establish the need for certain types of infrastructure, as well as identifying potential key issues that should be considered by the decision maker. Section 104 of the Planning Act 2008 makes clear that where an NPS exists relating to the development type applied for, the Secretary of State must have regard to it. The NPSs provide specific policy in relation to offshore wind development, and the policies set out in NPS EN-1, EN-3, and EN-5 therefore apply.

This national need relates both to the decarbonisation of the electricity supply within the required timeframe and to the risk the decarbonisation programme could pose to the security of electricity supply as more traditional generating stations are decommissioned. With regard to the latter, the Secretary of State notes the ruling in case C-411/17 by the European Court of Justice that the objective of ensuring the security of the electricity supply constitutes an IROPI.

At the time the NPSs were published, scientific opinion was that, to avoid the most dangerous impacts of climate change, the increase in average global temperatures must be kept to no more than 2 degrees Celsius. Global emissions must therefore start falling as a matter of urgency.

The energy NPSs were intended to speed up the transition to a low-carbon economy and help the UK to realise its climate change commitments sooner than would a continuation under the current planning system. They recognise that moving to a secure, low-carbon energy system to enable the UK to meet its legally binding target to cut greenhouse gas emissions by at least 80% by 2050, compared to 1990 levels, is challenging, but achievable. This would require major

investment in new technologies to electrify heating, industry, transport, and cleaner power generation. Under some 2050 pathways, electricity generation would need to be virtually emission-free, as emissions from other sectors were expected to persist. Consequentially, the need to electrify large parts of the industrial, heating, and transportation sectors could double electricity demand by 2050.

The NPSs conclude that the UK needs sufficient electricity capacity from a diverse mix of technologies and fuels, and therefore the UK also needs all forms of energy infrastructure covered by the NPSs to achieve energy security at the same time as dramatically reducing greenhouse gas emissions. Thus, all applications for development consent for the forms of energy infrastructure covered by the energy NPSs should be assessed on the basis that the Government has demonstrated that there is a need for those forms of infrastructure and that the scale and urgency of that need is as described within EN-1 Part 3. Substantial weight should therefore be given to the contribution which projects would make towards satisfying this need for a secure, low carbon, electricity supply when considering applications for development consent under the Planning Act 2008.

To achieve the target of UK commitments to largely decarbonise electricity generation by 2030, the NPSs conclude that it is necessary to bring forward new renewable electricity generating projects as soon as possible. The need for new renewable electricity generation projects is therefore urgent. The NPSs expect offshore wind farms to make up a significant proportion of the UK's renewable energy generating capacity up to 2030 and towards 2050.

8.2 The United Kingdom's legal commitment to decarbonise

This section sets out the obligations of the Climate Change Act 2008, against which the 2024 NPSs were established. It then outlines the UK's 2019 legally binding commitment to achieving 'Net Zero' carbon emissions by 2050, against which the need for future electricity generation developments should be assessed, as well as updated ambitions in the Clean Power Action Plan 2030 (2024).

8.2.1 Climate Change Act 2008

The Government through the 2008 Act, set legally binding carbon targets for the UK, aiming to cut emissions (relevant to the 1990 baseline) by 34% by 2020 and at least 80% by 2050, through investment in energy efficiency and clean energy technologies such as renewables, nuclear, and carbon capture and storage.

The 2008 Act is underpinned by further legislation and policy measures. Many of these have been consolidated in the UK Low Carbon Transition Plan (LCTP), and UK Clean Growth Strategy. A statutory body, the Committee on Climate Change (CCC), was also created by the 2008 Act, to advise the UK and devolved Governments and Parliaments on tackling and preparing for climate change, and to advise on setting carbon budgets. The CCC reports regularly to the Parliaments and Assemblies on the progress made in reducing greenhouse gas

emissions. The UK Government has set five-yearly carbon budgets which currently run until 2032.

8.2.2 Enhancements of existing UK Government Policy: Net Zero

In October 2018, following the adoption by the UN Framework Convention on Climate Change of the Paris Agreement, the Intergovernmental Panel on Climate Change (IPCC) published a 'Special Report' on the impacts of global warming of 1.5 degrees Celsius above pre-industrial levels. This report concluded that human-induced warming had already reached approximately 1 degrees Celsius above pre-industrial levels, and that without a significant and rapid decline in emissions across all sectors, global warming would not likely be contained, and therefore more urgent international action is required.

In response, in May 2019, the CCC published their report titled: 'Net-Zero: The UK's Contribution to Stopping Global Warming'. This report recommended that the UK Government extend the ambition of the 2008 Act past the delivery of net UK greenhouse has savings of 80% from 1990 levels, by 2050. The CCC recommended that "the UK should set and vigorously pursue an ambitious target to reduce GHG emissions to 'Net-Zero' by 2050, ending the UK's contribution to global warming within 30 years." Importantly, the CCC recommendation identified a need for low-carbon infrastructure development which is consistent with the need case set out in NPS EN-1, but points to an increased urgency for action.

Since the implementation of the Climate Change Act 2008, the UK Government has set five-yearly carbon budgets. The latest of which is the sixth carbon budget (CB6) which was laid in legislation in April 2021 and commits to cutting greenhouse gas emissions by 78% by 2035, compared to the 1990 level, in line with the CCC's recommendation. The sixth carbon budget spans from 2033-2037.

In October 2021, the UK Government published The Net Zero Strategy: Build Back Greener. It is a cross-economy strategy which set out the measures to keep the UK on a path to achieving Net Zero, including action to keep on track for meeting carbon budgets and the UK's 2030 Nationally Determined Contribution. The Net Zero Strategy was set to meet the level of decarbonisation that CB6 requires and simultaneously cater to a 40-60% increase in electricity demand. This presents a substantial challenge and could require having to build out all currently known low-carbon technologies in the power sector at or close to their maximum technical limits by 2035.

In March 2019 the Government announced its ambition to deliver at least 30GW of offshore wind by 2030, as part of the Offshore Wind Sector Deal (the 'Sector Deal'). The Sector Deal reinforced the aims of the UK's Industrial Strategy and Clean Growth Strategy, which seeks to maximise the advantages for UK industry from the global shift to clean growth, and in particular: "The deal will drive the transformation of offshore wind generation, making it an integral part of a low-cost, low-carbon, flexible grid system." Within supplementary documents to the Queen's Speech, December 2019, the Government committed to increase their ambition on offshore wind to 50GW by 2030. In June 2019, the Government amended the 2008 Act to implement the CCC's recommendation. This made the UK the first major economy to pass laws requiring it to end its contribution to global warming by 2050.

In December 2024, the Government published the Clean Power 2030 Action Plan, updating the ambition to rapidly deploy new renewable energy capacity across the whole of the UK. The Plan

outlines that, by 2030, the power system must see clean energy sources produce at least as much power as Great Britain consumes in total over the whole year, and at least 95% of Great Britain's energy generation. This entails between 43-50 GW of offshore wind generating capacity to be installed, emphasising the urgent need for significant numbers of renewable energy projects to progress to construction.

Within this context, the importance of all offshore wind projects currently under development to the achievement of government policy and pledges is clear. Without the Project, it is possible that the delivery of the Government's renewable energy capacity and decarbonisation ambitions will fall short.

8.3 Conclusion

The ExA [ER C.6.8] noted that the absence of priority habitats and species allows the consideration of benefits of a social and economic nature.

The ExA, considering the information surrounding the need for the Project, the public interests presented, and that the interests are overriding when measured against the adverse effects on the affected features of the MBDE SPA and Ramsar site, RAE SPA and Ramsar site, and Liverpool Bay SPA, was content that IROPI for the Project has been established [ER 4.7.6].

No comments relevant to the HRA were received from any IP on the Applicant's IROPI case.

The Secretary of State has considered the extent of the predicted harm to the integrity of the MBDE SPA and Ramsar site, RAE SPA and Ramsar site, and Liverpool Bay SPA. The Secretary of State agrees with the ExA and the Applicant and considers that imperative reasons in the public interest for the Project to proceed are clearly established, especially the contribution that the Project would make towards renewable electricity generation and towards ensuring the security of electricity supply from a domestically generated source. The Secretary of State also notes the relevant CNP policy at NPS EN-1 4.2.21 which states that "the Secretary of State will consider the particular circumstances of any plan or project, but starting from the position that energy security and decarbonising the power sector to combat climate change…are capable of amounting to imperative reasons of overriding public interest (IROPI) for HRAs".

9 Compensatory measures

Having determined that there are no feasible alternative solutions and that the Project must be carried out for IROPI, the Secretary of State has proceeded to consider below the requirements of Regulation 68; to provide that any necessary compensatory measures are secured to ensure that the overall coherence of the NSN is maintained.

The Applicant submitted, on a without prejudice basis, a proposed package of compensatory measures for the following protected sites and qualifying features:

- LBBG feature of the MBDE SPA and Ramsar site
- LBBG feature of the RAE SPA and Ramsar site
- RTD feature of the Liverpool Bay SPA

9.1 Lesser Black Backed Gull – MBDE SPA and Ramsar and RAE SPA and Ramsar site

The Applicant stacked the compensation measures for LBBG for both the MBDE SPA and Ramsar site and the RAE SPA and Ramsar site, in which the same compensation measures were proposed for both protected sites collectively and scaled appropriately.

The compensatory measures proposed by the Applicant for LBBG are provided in the following documents:

- Habitats Regulations Assessment Without Prejudice Derogation Case (Clean) - Revision 04 (Volume 4) [REP5a-011]
- Outline Compensation Implementation and Monitoring Plan (Clean) - Revision 02 (Volume 4) [REP5a-013]

The initial compensatory measures suggested by the Applicant [APP-029] for LBBG were:

- Closure of sand eel and sprat fisheries
- Reduce by-catch by commercial fisheries
- Eradication/exclusion of mammalian predators at colonies
- Ending culling
- Habitat management to create suitable nesting vegetation height and cover
- Habitat management to reduce flooding of nests
- Release of captive reared chicks
- Providing a monetary contribution to strategic compensation through the Marine Recovery Fund (MRF)

The Applicant then assessed the long list of potential compensatory measures for LBBG against Defra's best practice guidance and recent offshore wind farm project experience. Each measure was evaluated using four criteria—chance of success, timeframes, cost-effectiveness, and deliverability—scored as low, medium, or high. Preference was given to measures higher in

Defra's compensatory hierarchy, as follows: 1 – Address the same impact at same location; 2 – Same ecological function different location; 3 – Comparable ecological function same location; 4 – Comparable ecological function different location. The review assumed that LBBG begin breeding at four years old as this is realistic and underpinned by current ecological conditions. . The three potential compensation measures considered suitable by the Applicant to take forward are:

- Exclusion of mammalian predators at colonies using fencing;
- Habitat management to create suitable nesting vegetation height and cover; and/or
- Providing a monetary contribution to strategic compensation through the MRF, if there is a mechanism by which this can be delivered.

In order to successfully deliver either of the project-specific compensation measures (CM) above the Applicant [REP5a-011] evaluated the potential of CM sites based on four key criteria: (i) connectivity to relevant SPAs, (ii) presence of breeding LBBG, (iii) limiting factors affecting breeding success, and (iv) the likelihood of site deliverability. Each site was scored as low, medium, or high against these criteria. Preference was given to sites with strong ecological connectivity to the MBDE SPA and/or RAE SPA, recent or current LBBG breeding activity, clear evidence of mammalian predation or habitat limitations, and minimal barriers to project-led implementation. This structured assessment informed the shortlisting of the most viable sites for stakeholder engagement. This enable a long list of seven potential CM sites to be narrowed down two viable options:

- Steep Holm Island (within the Severn Estuary SPA and Ramsar site) – suitable for habitat management to enable increased productivity.
- Banks Marsh (within the RAE SPA and Ramsar site) – suitable for protection from mammalian predation through predator fencing.

9.1.1 Steep Holm

The Applicant [REP5a-011] proposed vegetation and scrub management at Steep Holm, stating that this would likely be highly effective as scrub encroachment is a key factor limiting LBBG success at the site. Section 2.2 of annex 2A [REP5a-011] indicated that Steep Holm may function as a separate meta-population from the northwest England gull colonies. NE [REP5a-070] expressed confidence that adequate scrub clearance on Steep Holm, adjacent to an already densely populated area of the existing colony, is highly likely to result in an increase in the number of LBBGs nesting at the site. NE further noted that natal dispersal could feasibly and directly contribute to NSN resilience by supplying recruits into the impacted or other SPA populations.

NE confirmed that the site is within the Steep Holm SSSI and Severn Estuary SPA, but neither designation lists LBBG as a designated breeding feature. NE advised that LBBG numbers on Steep Holm have fluctuated, and the proposed intervention has the potential to increase the population. Although LBBG exhibit high philopatry (primarily recruiting at the natal site), NE considered it possible that individuals fledging from Steep Holm could recruit into other colonies, including at SSSP SPA or Isles of Scilly SPA, thereby contributing to the coherence of the NSN.

Notwithstanding this, NE [RR-061] made several comments on the proposed CM, including the need for drone surveys to monitor LBBG nesting in the cliffs and on the timing and duration of

monitoring. NE [REP2-037, appendix B7] stated that opportunities for scrub clearance, as well as nest and productivity monitoring and colour ringing, should be maximised at an appropriate time of year to mitigate risks that essential elements could not be undertaken. NE confirmed [REP3-092, ExQ1HRA23] that it would be best to avoid clearance between March and August, which is the typical breeding season for a range of small birds that may be nesting on the island.

In response to the RSPB's [RR-073] request for further information, the Applicant [REP4-058] noted that there is no definitive information on breeding density of LBBG on Steep Holm. The Applicant used a precautionary density based on information from Flat Holm, also in the Bristol Channel, and provided further information on scrub clearance to the CM steering group, to which the RSPB was invited.

Section 4 of Annex 2A [REP1-014] indicated that discussions were ongoing with the landowners. A letter of support from the landowners, the Kenneth Allsop Memorial Trust (KAMT), was provided at appendix 3. In response to a request from the ExA for a progress update, the Applicant [REP3-068, ExQ1HRA24] stated that a meeting with KAMT took place on 20 January 2025 to discuss a commercial agreement.

The Applicant [REP1-093, paragraph 71] stated that SSSI assent would be required from NE; this had been obtained for the trial clearance works, and the Applicant stated that NE confirmed that consent for the full works would not present a difficulty. The Applicant indicated that no other consents would be required. NE [RR-061] advised that the proposed works should be able to achieve SSSI consent (or assent), as impacts to the vascular plant assemblage feature of the SSSI could be avoided. NE confirmed in [REP2-037] that it saw no issues with obtaining the necessary NE consent. In response to ExQ1 [PD-011], the Applicant [REP3-068, ExQ1HTA21] stated that NE and KAMT had confirmed in discussions that there were no concerns about effects on the Steep Holm SSSI and Severn Estuary SPA from implementing the CMs.

The ExA [PD-011, ExQ1HRA21] sought clarification from the Applicant that the CMs proposed at Steep Holm would not give rise to effects on other designated species or features of the Severn Estuary SPA and Steep Holm SSSI. The Applicant responded [REP3-068] to confirm that NE and KAMT have no concerns in relation to any impacts on other sites and species at the Steep Holm SSSI. NE has confirmed no concerns in relation to the Severn Estuary SPA. Furthermore, the Applicant has not identified any pathways for an impact to occur.

By the close of examination, NE [REP5-083; REP5-081, ExQ2HRA1] had confidence that it was possible to deliver the measures at an appropriate level at Steep Holm and therefore that remaining matters would be resolved once the required scale of the compensation is agreed and secured.

9.1.2 Banks Marsh

NE [RR-061] noted that Banks Marsh represented a feasible compensation option which, if successful, could deliver more than the currently proposed compensation level, thereby addressing any accrued mortality debt early in the operational lifespan of the Project. The RSPB [REP3-114] stated that it was content that the proposed predator fence would meet the ecological objectives, based on experience elsewhere.

NE [RR-061] originally advised that, as no landowner agreement had been secured, there was insufficient certainty that the measure was deliverable. The Applicant [PD1-011] stated that no

landowner requirements beyond NE and the RSPB, and potentially the EA depending on the final fence alignment, were required. [REP1-093, sections 3.1.3 and 3.2] indicated that the option comprised a wider mega fence scheme being promoted by the RSPB and NE, to which the Project could contribute. In addition, the necessary consents and permits were in preparation and would be obtained by the RSPB and NE, and permission had been obtained from the relevant landowners. Appendix A to [REP1-093] comprises a letter from NE confirming its approval. Paragraph 28 of [REP1-093] confirmed that the EA had provided email permission to NE for works covering its interests, although evidence of this was not submitted. NE [REP2-037 annex B7] acknowledged the confirmed landowner permission.

The Applicant [REP1-093] stated that the fence would be built to the RSPB specification and that planning permission was not required, as it would benefit from permitted development rights under the Town and Country Planning (General Permitted Development) (England) Order 2015. A flood risk activity permit would be needed due to the proximity to an engineered sea defence, as would consent from NE where works are proposed within a SSSI. NE [REP2-037, appendix B1] stated that it understood that for most of the route, the megafence would replace existing enclosure infrastructure and that no issues had been raised during consultation with local EA staff.

The ExA [PD-011] requested the Applicant to provide any evidence of discussions held with the relevant local planning authorities regarding any planning consents that may be required. The Applicant [REP3-068, ExQ1 HRA26] stated that discussions had yet to take place with Sefton and West Lancashire Councils, but as the proposed megafence would replace an existing fence line, NE considered it would be permitted development. The Applicant stated that this would be confirmed through pre-planning advice.

The Applicant [REP1-093] stated that an HRA of this option was carried out by NE and that no detrimental impacts or pathways for impacts were identified. The Applicant submitted a copy of the HRA [REP3-068, appendix C] in response to a request from the ExA [PD-011, ExQ1 HRA25]. The HRA concluded there would be no LSE arising from the installation of predator fencing.

The Applicant [REP1-014] stated that the objective would be to implement predator fencing (if selected) before the breeding season commences four years prior to the start of operation, as four years is the age at which LBBG typically start breeding. If operation commenced before new adult birds are produced at the compensation colony, a mortality debt would arise, which would need to be paid back during future operational years.

NE [REP2-037, appendix B7] provided detailed comments on [REP1-093], noting that more information may be contained in a feasibility study by the RSPB, which has not been submitted to the Examination. NE raised the following points:

- It is not clear how much of the approximately 1,750 hectares available at Banks Marsh is suitable habitat for nesting gulls, or what amount would be assigned if required as CMs for the proposed development.
- Some part of the area is not protected by a new embankment and is liable to flooding at certain times, such as high spring tides, which has previously contributed to reduced LBBG breeding success. NE was not able to rule out climate-related higher tides, amongst other factors, as contributory to a recent colony collapse.

- NE requested an indicative location and figure for the extent of land suitable for nesting LBBG, inclusive of the area to be monitored for the purposes of satisfying the CM (if required).

In doing so, NE recommended consideration of climate change to flood risk over construction and operation.

The Applicant [REP3-069] confirmed that the feasibility study was only available in draft form. The Applicant stated that NE's comments would be captured in the final report but did not substantively respond to them.

The Applicant [REP3-008] in annex 2A stated that mammalian predator fencing or scrub clearance of 0.06 hectares per year would be required to achieve the compensation target of 26 nests, for which there was abundant capacity through either Banks Marsh or Steep Holm. The RSPB [REP3-114] requested clarification from the Applicant as to whether it would be in a position to advise on the option being progressed. The Applicant [REP4-058] set out that the proposed CMs at Steep Holm had progressed to enable commencement of delivery in 2025. This is the preferred option, with the options of Banks Marsh and South Walney retained should options at Steep Holm not be progressed.

By the close of the Examination, NE [REP5-083; REP5-081, ExQ2HRA1] had confidence that it was possible to deliver the measures at an appropriate level at Banks Marsh, should the preferred option of Steep Holm not be progressed, and therefore that remaining matters would be resolved once the required scale of the compensation is agreed and secured.

Regarding the proposed project-led CM at Steep Holm and Banks Marsh, the ExA [ER C.7.46] concluded that the overall package of proposed CMs is feasible, appropriate and would ultimately ensure the overall coherence of the UK NSN.

9.1.3 Compensation Quantum and Methodology

NE initially advised [RR-061, REP1-098, REP2-037, REP3-093] that the compensation level proposed by the Applicant was inadequate. NE highlighted that the Applicant's compensation ratio did not account for the relocation of adult birds from nearby sites, such as the cliffs at Steep Holm, nor did it consider increased foraging distances, which could raise the risk of collisions with offshore wind farms.

In response, and as outlined in the RIES [PD-017], the Applicant updated its compensation calculations [REP3-008, annex 2A]. It estimated that 26 new nest spaces would be required to offset the predicted annual mortality of 1.02 adult LBBG. This estimate was informed by Ross-Smith et al. (2015), which recorded 348 nests in 0.77 hectares, equating to 452 nests per hectare. To meet the compensation target, the Applicant proposed clearing or fencing 0.06 hectares of habitat per year.

The ExA [PD-011, ExQ1HRA19] requested clarification on why the Applicant did not use the precautionary upper confidence level (UCL) of 3.83 individuals. The Applicant [REP3-068, ExQ1HRA19] explained that mean predicted mortality was used in comparable projects (Norfolk Boreas and Vanguard) and considered its approach sufficiently precautionary. It cited a 3:1 compensation ratio and asserted that all proposed measures would deliver over-compensation.

Discussions between NE [REP4-066] and the Applicant [REP5-060] continued. The Applicant maintained that its project-led CM would overcompensate for predicted losses, increasing the compensation level from 18 to 26 nests based on the central impact value (CIV). NE [REP5a-070] advised that the CM target should be based on the CIV of 1.02 adults per year (0.33 from MBDE and 0.69 from RAE), but recommended scaling using the UCL. As Steep Holm lies outside the NSN for LBBG, NE further advised applying a multiplier to account for philopatry. NE concluded that a 3:1 ratio was justified due to uncertainty around impact levels, resulting in a requirement for 100 breeding pairs and 0.21 hectares of nesting habitat.

NE [REP5a-070] also commented on the compensation quantum, endorsing the Hornsea 3 Part 2 (H3pt2) method as the most ecologically complete for calculating breeding pair requirements. However, NE acknowledged limitations in the H3pt2 method, especially for species with low natal dispersal, older recruitment ages, and lower productivity, which could lead to disproportionate scaling. NE therefore recommended the Hornsea 4 method with modifications.

NE confirmed that the CIV was 1.02 adults per year from the two SPAs combined, with a UCL of 3.43 adults. It noted that the Applicant's 'Without Prejudice Derogations Case' [REP3-009] was based on the CIV and that the Applicant was unable to replicate the Hornsea 3 model. Instead, the Applicant proposed a multiplier of 25.6, resulting in a compensation target of 26 nest spaces.

NE emphasised the need to consider philopatry for Steep Holm, given its location outside the NSN. NE calculated that ten breeding pairs would be required, but advised that the measure should be scalable. NE recommended using the UCL, applying the Hornsea 4 method with philopatry, and a 3:1 ratio to determine the number of pairs the measure should accommodate. Nesting density should then be used to define the minimum area of scrub clearance.

NE considered the 3:1 ratio a significant scaling up, requiring 0.21 hectares of scrub clearance for 100 nesting pairs. This approach would not affect colony productivity but would address uncertainty in impact levels. NE preferred scaling at a single site over multiple smaller sites.

NE's Calculations

- **Calculation 1 – Based on CIV:**
  1.02 breeding recruits / survival rates = 2.08 fledglings
  Adjusted for philopatry: 2.08 / 0.470 = 4.43 fledglings
  Adjusted for productivity: 4.43 / 0.45 = 9.85 ≈ 10 pairs

- **Calculation 2 – Based on UCL:**
  3.43 breeding recruits / survival rates = 7.01 fledglings
  Adjusted for philopatry: 7.01 / 0.470 = 14.91 fledglings
  Adjusted for productivity: 14.91 / 0.45 = 33.13 pairs
  3:1 ratio: 33.13 x 3 = 99.4 ≈ 100 pairs
  Area required: 100 pairs / 0.0475 nesting density = 0.21 hectares

The Applicant disagreed with applying both the UCL and the 3:1 ratio, arguing this would result in a tenfold increase over the base requirement. It preferred calculation 1, consistent with Norfolk Boreas and Vanguard, and was satisfied that both calculations accounted for philopatry.

Despite its reservations, the Applicant confirmed that the proposed scrub clearance at Steep Holm was approximately five times greater than required for 100 nests, capable of delivering the compensation quantum. However, it cautioned that this should not set a precedent for future projects due to potential land availability constraints.

By the close of the Examination, although NE and the Applicant had not reached agreement on the compensation calculation method, NE [REP6-051, REP6-052] accepted that the proposed CM was sufficient, subject to confirmation that at least 0.21 hectares would be enclosed. This could be delivered at either Steep Holm or Banks Marsh.

The outline CIMP [REP5a-013] included a commitment to 1.08 hectares of scrub clearance at Steep Holm, which NE [REP6-048] confirmed was sufficient.

While the ExA noted that all parties agreed the proposed scrub clearance at Steep Holm would more than adequately compensate, it highlighted the unresolved issue of the accuracy of calculations based on natal dispersal rates.

The ExA identified a potential error in NE's use of the natal dispersal rate (0.470) instead of its inverse (0.530) to represent philopatry. While the difference is modest, it does slightly affect the outcome of the calculations. The ExA carried out a side-by-side comparison of the three scenarios—NE's original calculation, corrected philopatry, and no philopatry—showing a range of required breeding pairs from 5 to 100 and scrub clearance from 0.098 to 0.21 hectares.

Given the proposed scrub clearance of 1.08 hectares, the ExA calculated the remaining land and bird capacity under each scenario. Two additional scenarios based on the Applicant's positions (600m² clearance and compensation for 30 pairs) were also considered.

9.1.4 Conclusion on quantum

The Secretary of State concludes that, due to the location of the proposed scrub clearance being outside the NSN, it is appropriate in this instance to include philopatry in the compensation calculations, as recommended by NE.

When considering how to scale the compensation measure, the Secretary of State notes the following:

- The impact value is low,
- The measure is likely to be highly effective,
- Philopatry has already been included in the calculations.

Given these factors, it would be unreasonable to also apply the UCL and impose an additional compensation ratio beyond 1:1. In agreement with the Applicant [REP6-049], the Secretary of State does not support applying both the upper 95% confidence limit and a 3:1 compensation ratio when calculating the final compensation value. As the Applicant notes, this approach would, by NE's calculation, require ten times the base requirement, which would result in over-compensation for the impacts. The Secretary of State considers that using the mean (CIV) value plus a 3:1 ratio (equivalent to 30 nests) is appropriate and reasonable.

In addition, the Secretary of State also agrees with the ExA that the use of the natal dispersal rate appears to be incorrect, but this can be readily corrected.

Therefore, the Secretary of State concludes that NE's (ExA-corrected) calculation 1 is appropriate, but calculation 2 should also use the CIV. This results in a minimum area of scrub clearance to be delivered of approximately 568m² (noting the Applicant's figure of 600m², which may reflect rounding differences).

9.1.5 Strategic Compensation

The Applicant [REP5a-011] also explored strategic CM options via the MRF, acknowledging that while strategic compensation could be used in future, it could not be solely relied upon at present. Part 1 of Schedule 7 to the DCO includes provisions for strategic CM as an alternative to project-led measures, if available.

9.1.6 Conclusion

Having reviewed all the information before him, the Secretary of State is satisfied that the compensation level and scale of compensation required as identified are appropriate, and appropriate monitoring and adaptive management is secured to ensure the long-term success of the measures.

The Secretary of State is satisfied that the necessary compensatory measures can be secured and delivered to protect the coherence of the UK NSN for Lesser Black-backed Gull as required by Regulations 29 and 36 of the Offshore Habitats Regulations and Regulations 64 and 68 of the Habitats Regulations. He considers that Part 1 of Schedule 7 to the DCO adequately secures the further work required to progress the proposed compensation measures, including a contribution to the MRF if available, or the approval of a final CIMP.

9.2 Red-Throated Diver - Liverpool Bay SPA

The compensatory measures proposed by the Applicant for RTD are provided in the following documents:

- Habitats Regulations Assessment Without Prejudice Derogation Case – Red-Throated Diver at Liverpool Bay / Bar Lerpwl SPA (Clean) - Revision 04 (Volume 4) [REP5a-046]
- Outline Compensation Implementation and Monitoring Plan – Red-Throated Diver (Clean) - Revision 02 (Volume 9 [REP5a-048]

The initial compensatory measures suggested by the Applicant [REP3-064] for RTD were:

- Reducing disturbance from existing anthropogenic activity (vessels and helicopters)
- Reduction in fisheries bycatch
- Closure of sand eel and sprat fisheries
- Enhance breeding habitat (nesting rafts and/or habitat management)
- Creation of 'sanctuary' or reserve areas within Liverpool Bay SPA
- Designation of additional SPAs or increase to existing SPA area designated for RTD
- Contribution to a strategic fund

The Applicant then assessed each initial measure against the Defra compensation guidance (2021[12], 2024[13]) which identifies a hierarchy of compensation that recognises that like-for-like compensation may not always be possible. The hierarchy was as follows: 1 – Address the same impact at same location; 2 – Same ecological function different location; 3 – Comparable ecological function same location; 4 – Comparable ecological function different location. Based on this review, the two potential compensation measures considered suitable by the Applicant to take forward are:

- Enhance breeding habitat (nesting rafts and/or habitat management); and/or
- Contribution to a strategic fund.

The Applicant considers enhancement of breeding habitat as the preferred option, on the assumption that the Project would be taking the CM forward alone. However, should strategic measures become available, it would be expected that this would be favoured.

9.2.1 Project-led compensation measures

The Applicant [REP5a-046] stated that delivery of a project-led CM would not be feasible at Liverpool Bay SPA. It reviewed alternative locations across mainland, north and west coasts of Scotland, noting that although no studies exist on the breeding origin of RTD present in the Irish Sea, expert consultation indicated that birds in Liverpool Bay SPA most likely breed on the west coast of Scotland.

The Applicant [REP5a-046] presented ecological evidence regarding constraints to RTD productivity. It referenced studies from North America, Finland, and Scotland which concluded that artificial rafting nests can increase productivity for three species of diver, including RTD. These studies attributed increased productivity to the elimination of nest flooding, reduced human disturbance, and lower predation. The Applicant also noted that restoration and management of “peatland lochans” in Shetland is being undertaken by Viking Wind Farm to benefit RTD, creating smaller waterbodies preferred by the species.

The Applicant outlined the approach to long- and short-listing potential compensation sites for project-led measures, with results presented in Appendix A1 [REP5a-046]. Appendix B1 included location plans (provided on a confidential basis) of the long- and short-listed sites.

The Applicant provided further detail on raft design and potential locations, focusing on lochs near the northern and western Scottish mainland coast and the Hebrides. Table 4.1 summarised the location and number of suitable lochs for which in-principle landowner agreement had been discussed. Letters of support for sites in the Inner Hebrides and Highlands were provided in appendix 2. The Applicant stated that site visits would be undertaken in spring or summer 2025 to confirm loch suitability.

The Applicant proposed to provide 20 compensation lochs with nesting rafts and/or habitat management, alongside 20 control sites to monitor breeding success. Assuming an increase in productivity of 0.4 young per year per occupied raft, and an occupancy rate of 60–90%, the

[12] https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site#derogation

[13] https://www.gov.uk/guidance/nationally-significant-infrastructure-projects-advice-on-habitats-regulations-assessments

Applicant estimated that 20 rafts could result in 5 to 7 additional fledged birds annually. Rafts would be installed pre-construction, with RTD expected to begin using them the following summer and fledglings appearing in the first winter (12 months post-installation).

The Applicant stated that a RTD CM steering group would be established. A detailed CIMP, aligned with the outline CIMP [REP5a-048], would be secured through the final DCO via an additional compensation schedule for Liverpool Bay SPA.

The Applicant confirmed that landowner permission would be sought through legal agreement, such as a lease, for the lifetime of Project. The Applicant considered that planning permission was unlikely to be required for the rafts but noted that SSSI consent or assent might be required from NatureScot. In addition, the Applicant detailed proposed monitoring and adaptive management measures.

NE [REP4-066] stated that, in broad terms, the measure was well evidenced and could reasonably be expected to deliver benefits for RTD and, subject to appropriate site selection, contribute to the NSN. NE emphasised the importance of site selection and requested further information. It also asked the Applicant to consider unintended consequences, such as attracting divers away from SPAs into unprotected areas, and increased predation risk, particularly from American mink in mainland locations. NE highlighted the difficulty in measuring the success of the proposed CMs and concluded that it was broadly content with the scale of compensation, subject to suitable locations being identified. NE queried whether the measures would be more effective if delivered in collaboration with the North Falls Offshore Wind Farm, which was at that time undergoing examination by the Planning Inspectorate.

NE advised [RR-061] that its primary concern was regarding the restore objective for feature distribution and therefore designing and delivering derogations for RTD would be challenging, given that the nature of the impact is less fixed than that of mortality. NE [REP5-082] agreed with the Applicant that there is no measurable direct link between the potential effect (habitat loss/degradation) and the proposed scale of compensation (increased productivity), and therefore no robust method to scale the level of compensation. Commenting on the Applicant's proposal to provide 20 rafts to enable five to seven additional fledged birds annually, NE stated that success is generally measured by the number of breeding adults. Given that RTD survival rates are not well evidenced but are thought to be relatively low, NE advised that the CM would be expected to deliver approximately two additional adult RTD per year. Nonetheless, NE agreed that the proposed scale of compensation was broadly appropriate.

In response to NE's comments, the Applicant [REP5-054] stated that it had identified sufficient lochs within the relevant landholdings to meet the proposed scale of compensation.

NE [REP4-066] noted that direct connectivity with the impacted site may not necessarily be advantageous, as delivering additional birds into a site adversely affected by disturbance may be less beneficial to the UK NSN than if those birds were to winter in less impacted areas. NE recommended consultation with NatureScot and other local stakeholders regarding adaptive management.

The Applicant provided an update on CMs [REP5-054], including landowner negotiations and changes made following NE's feedback. The Applicant committed to providing rafts on known breeding lochs as well as lochs where breeding had not previously been confirmed. It also committed to considering habitat enhancement measures targeted to support breeding RTD.

Although the success rate of this measure is unknown, the Applicant considered it complementary and resilient alongside the primary raft CM. Monitoring measures would be developed in agreement with local stakeholders. Further information was also provided on potential adaptive management measures. Paragraph 17 of [REP5a-046] recognised a potential role for strategic CMs in the form of peatland restoration schemes, and the Applicant stated it was seeking collaboration with other developers in this regard.

NE [REP5-082] provided its view on the confidence level in the proposed CMs. It acknowledged that, given the location of the measure in Scotland, the targeting of breeding rather than non-breeding RTD, and the uncertainty surrounding the breeding origins of divers overwintering in Liverpool Bay, there may not be a direct benefit to the impacted population. NE noted that the measure would not address disturbance and displacement impacts (effectively habitat loss) on non-breeding RTD. However, NE recognised connectivity with the NSN through potential recruitment into Scottish SPAs designated for breeding RTD, and possibly also to Scottish and English SPAs designated for non-breeding RTD.

NE [REP5-082] stated that nesting rafts have a long history of success and are technically feasible, provided baseline data demonstrates a need at the site. NE also highlighted the importance of managing water levels to ensure success. Based on previous studies, NE was satisfied that the CM could be delivered before the point of impact, with evidence suggesting rafts would be used within the first year or shortly thereafter.

NE [REP5-082] emphasised the importance of raft location and concluded that the measure would be suitable as a primary CM, ideally delivered alongside habitat management where appropriate.

By the close of the Examination, NE [REP5-082] provided commentary on the proposed without prejudice CMs. In summary, NE:

- agreed that nesting rafts and habitat management measures could theoretically deliver compensation;
- agreed that these measures are technically feasible;
- agreed that there is no direct measurable link between the effect and the proposed scale of compensation;
- broadly agreed with the scale of compensation, subject to suitable locations being secured;
- agreed that compensation could be delivered before the effect occurs;
- recognised the Applicant's efforts to avoid overlap with measures proposed for North Falls OWF;
- requested further information on selected sites and rationale for selection;
- broadly agreed with the design and monitoring of the rafts, subject to further discussion.

NatureScot [REP5-086] did not provide comment at Deadline 5 but noted it was due to meet the Applicant on 18 March 2025 to discuss the CMs. No further comments were received from NatureScot during the Examination.

NE [REP6-051] commented that the Applicant's revised outline CIMP for RTD, submitted at Deadline 5a [REP5a-048], required further development regarding specific locations and interventions to ensure the measures could be secured. NE's final Risks and Issues Log [REP6-052] also noted that strategic compensation options for RTD were limited, but NE expressed a willingness to continue progressing this matter.

Regarding strategic compensation, the Applicant [REP5a-046] acknowledged that Defra is considering strategic measures for RTD, potentially through contributions to a strategic fund. However, as timescales remain uncertain, this was not a matter before the Examination. The Applicant concluded that the project-specific measures are reliable and securable. Should strategic measures become available, the Applicant stated it would consider them. It also committed to exploring secondary measures such as peatland restoration schemes, which could benefit RTD.

The ExA [ER C.7.76] considered that there is sufficient information for the Secretary of State to establish that appropriate compensatory measures can be implemented, if necessary, in accordance with the requirements of the Habitats Regulations. The ExA concludes that the overall package of proposed CMs is feasible, appropriate, and would ultimately ensure the coherence of the UK NSN.

Despite a lack of engagement within the Examination, NatureScot made a post-examination representation to the Secretary of State regarding the proposed RTD CM. NatureScot considered that significant detail is still required on the derogation case and compensation plan for RTD, including site selection, management actions (such as raft siting or peatland management), monitoring arrangements, and adaptive management measures. NatureScot also raises broader questions about cross-border compensation, including the potential removal of compensation or mitigation opportunities for projects within the receiving jurisdiction, unintended consequences for local communities and statutory bodies, and the need for community involvement in the planning process.

Noting NE and NatureScot's concerns with the outline CIMP, the Secretary of State sought further detail from the Applicant during the first consultation on the shortlisted locations proposed for the RTD CMs. Specifically, clarity was sought on the rationale behind site selection, including how each site was assessed for suitability in terms of known RTD breeding success and habitat characteristics. An update on landowner support was also requested, with clarification on whether the waterbodies for which support has been secured are considered optimal.

Additionally, the Applicant was requested to evaluate risks associated with the proposed CM sites, including consideration of the potential for RTDs to be drawn away from designated SPAs into areas lacking statutory protection, and any adverse outcomes that could arise from inappropriate habitat management interventions.

The Applicant responded with a detailed update on the development of the compensation proposals in its *'Appendix B: Update to red-throated diver compensation proposals'*.

The Applicant explained that, post-Examination, it had undertaken a systematic review of all supportive landowners to prioritise those most likely to provide suitable conditions for compensation delivery. The selection process was guided by criteria including proximity to coastal waterbodies with suitably sized lochs and lochans for RTD breeding requirements, and previous breeding records. Estates that were found to be less suitable due to their distance from

coastal habitats were excluded, and a further estate was excluded due to the small number of suitable lochs.

As a result, five estates were identified as the most promising for further progression: A, B, C, D, and E. These estates were selected for their combination of habitat suitability and landowner engagement. The Applicant then conducted site visits to Estates A, C, D, and E in June 2025, with B excluded from initial visits due to logistical constraints. During these visits, the Applicant and an ornithologist engaged directly with landowners and estate managers to discuss the principles and logistics of the compensation measures, review existing knowledge of RTD breeding activity, and assess practicalities such as access and estate staff support.

The Applicant detailed the results the site visits. For example, Estate A was found to have at least nine lochs with recent or current RTD breeding, and over 20 additional lochs suitable for enhancement. The estate's staff and local ornithological specialists demonstrated strong support and practical knowledge, including experience with mink control—a relevant adaptive management measure. Estate D was confirmed to have several lochs with evidence of RTD use, and Estate E provided both knowledge of diver activity and experience with raft deployment and mink trapping. Estate C, while less well-documented for RTD presence, was included for further survey work due to its potential and willingness to support compensation delivery.

The Applicant also undertook specialist surveys for Estates B and C to fill gaps in knowledge and confirm suitability. These surveys used established protocols and professional judgement to evaluate loch characteristics, resulting in the identification of between two and four suitable lochs at Estate C and three to six at Estate B. Across all five estates, between 46 and 53 lochs were ultimately identified as suitable for compensation measures by the Applicant.

The Applicant also evaluated the risks associated with the proposed sites, in which considers it highly unlikely that RTDs would be drawn away from designated SPAs, citing strong site fidelity and the significant distance between compensation sites and SPAs. It asserted that habitat management is not proposed as a primary measure but may be considered adaptively if required, with oversight from a steering group to ensure appropriateness and minimise unintended consequences.

The Applicant also detailed consultation with NE post-examination, stating that NE had welcomed the progress made and supporting the rationale for the distribution and scale of compensation measures. The Applicant noted that it had reviewed the scale of compensation at now proposes the following:

- Provision of rafts on 10 lochs where there is evidence of existing nesting RTDs
- Control lochs (without rafts) where there is evidence of existing nesting RTDs
- Provision of rafts on 10 suitable lochs close to existing nesting RTDs

The Applicant stated that this approach is based on maximising benefits to the population by deploying nesting rafts at both existing breeding sites and nearby suitable lochs. It cites evidence [REP5a-046] which supports the effectiveness of rafts in increasing productivity at established breeding lochs, while also demonstrating that introducing rafts at new sites can successfully increase the number of breeding pairs. By combining these two strategies, the Applicant aims to boost both productivity and the overall breeding population.

To ensure the effectiveness of the measures, the Applicant proposes control sites at 10 existing breeding lochs, enabling comparative monitoring and providing data to inform adaptive management if needed. For new raft lochs, control sites are not required, as these locations have a zero baseline for RTD presence and productivity; any breeding activity observed would represent a clear, absolute increase attributable to the intervention. Natural England has agreed that the proposals would provide an appropriate scale of compensation for the potential effects of the Project on Liverpool Bay SPA.

During the first all-IPs consultation, NE acknowledged the progress made on RTD compensation measures and welcomed the identification of a sufficient number of lochs to deliver the approach as agreed with the Applicant. It also noted that the majority of the lochs are located on one Estate, which presents a risk to delivering the planned level of compensation should an agreement not be reached with this Estate. No further representations were received from NE on this matter.

9.2.2 Strategic Compensation

Regarding strategic compensation, the Applicant [REP5a-046] acknowledged that Defra is considering strategic measures for RTD, potentially through contributions to a strategic fund. However, as timescales remain uncertain, this was not a matter before the Examination. The Applicant concluded that the project-specific measures are reliable and securable. Should strategic measures become available, the Applicant stated it would consider them. Part 2 of Schedule 7 to the DCO includes provisions for strategic CM as an alternative to project-led measures, subject to the approval of the Secretary of State post-consent.

9.2.3 Conclusion

Having reviewed all the information before him, the Secretary of State is satisfied that the compensation level and scale of compensation required as identified are appropriate, and appropriate monitoring and adaptive management is secured to ensure the long-term success of the measures.

The Secretary of State is satisfied that the necessary compensatory measures can be secured and delivered to protect the coherence of the UK NSN for RTD as required by Regulations 29 and 36 of the Offshore Habitats Regulations and Regulations 64 and 68 of the Habitats Regulations. He has reviewed Part 2 of Schedule 7 to the DCO as proposed by the Applicant [REP6-002] and notes that it was omitted from the ExA's recommended DCO. Accordingly, the Secretary of State has included a modified version of Part 2 of Schedule 7 in the final DCO, which adequately secures the further work needed to progress the proposed compensation measures, including either a contribution to the MRF or approval of a final CIMP. The reasoning for the modifications is set out in section 8 of the Decision Letter.

10 Transboundary assessment

The Secretary of State considers that it is important to consider the potential impacts on protected sites in other European Economic Area ("EEA") states, known as transboundary sites. The ExA also considered the implications for transboundary sites. The conclusions of the ExA's considerations and the Secretary of State's own views on this matter are presented below.

On 16 November 2022, following the Applicant's request for an EIA scoping opinion, PINS undertook a transboundary screening and consultation on behalf of the Secretary of State pursuant to Regulation 32 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and the United Nations Environment Programme Convention on Biological Diversity 1992. A second and final screening was undertaken on 26 July 2024 following submission of the Application documents. PINS considered that the Project was likely to have a significant effect either alone or in-combination on the environment in an EEA state. Notification of transboundary issues were required under Regulation 32 of the 2017 EIA Regulations and issued to Belgium and the Republic of Ireland.

Potential transboundary impacts were considered in the Applicant's Screening Report [REP3-006] and further discussed in the Applicant's RIAA [REP5a-009]. The Secretary of State notes that the Applicant considered non-UK protected sites in its application and concluded that there would be no AEoI from the Project alone and in-combination on any transboundary sites.

NE [RR-061] confirmed that the protected sites identified by the Applicant are those relevant the Project. The protected sites and qualifying features identified by the Applicant were not disputed during the Examination [C.2.5].

The Republic of Ireland Department of Housing, Local Government and Heritage responded highlighting the need for in-combination assessments and which plans and projects should be considered. However, they did not engage further with the process and did not raise any disputes with the Applicant's screening for LSE.

Belgium was identified as likely to be impacted by transboundary effects but only in relation to commercial fisheries. No Belgian protected sites were identified by the Applicant and the Belgian Government only wished to be included in the Examination in relation to fisheries [ER.2.8.5].

The ExA was satisfied that, on the basis of the information provided by the Applicant and NE's agreement that the correct sites and qualifying features had been considered in the RIAA, that the Project would not have an AEoI on protected sites in any EEA state [ER 2.8.6].

The Secretary of State has not been presented with any substantive evidence to demonstrate that transboundary impacts would have an AEoI on any protected site in an EEA state. 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 AEoI on any transboundary protected site. The Secretary of State is satisfied that further stages of a transboundary assessment are therefore not required.

11 Conclusion

The Secretary of State has carefully considered all information presented within the Application, during the Examination, and the representations made by NE and all IPs, along with the ExA's Recommendation Report.

The Secretary of State concludes that an AEoI cannot be ruled out on the LBBG feature of the MBDE SPA and Ramsar and RAE SPA and Ramsar due to collision impacts, and the RTD feature of the Liverpool Bay SPA due to displacement impacts. He has considered the derogation provisions to determine whether the Project can be consented.

The Secretary of State is satisfied that there are no feasible alternative solutions to fulfilling the objectives of the Project which would remove or reduce the risk of an AEoI of the protected sites. The Secretary of State is also satisfied that there are clearly imperative reasons in the public interest for the Project to proceed, and that these reasons clearly outweigh the impacts to the protected sites.

The Secretary of State is also satisfied that a package of compensatory measures to ensure that the overall coherence of the UK NSN is maintained is secured through Schedule 7 of the DCO and can be delivered with regards to LBBG of the MBDE SPA and Ramsar and RAE SPA and Ramsar, and the RTD of Liverpool Bay SPA.

Table 2: Protected sites and qualifying features considered in the assessment of LSE.

Protected Site	Qualifying Feature(s)	SACOs	Potential for Likely Significant Effects
Afon Eden – Cors Goch Trawsfynydd SAC	Atlantic Salmon	See footnote[14]	Underwater Noise and Suspended Sediments
Afon Gwyrfai a Llyn Cwellyn SAC	Atlantic Salmon	See footnote[15]	Underwater Noise and Suspended Sediments
Ailsa Craig SPA	Northern gannet Lesser black-backed gull Black-legged kittiwake* Herring gull* Common guillemot* Seabird assemblage	See footnote[16]	Collision and Barrier to Species Movement
Anglesey Terns/ Morwenoliaid Ynys Môn SPA	Sandwich tern Common tern	See footnote[17]	Collision Risk

[14] https://sac.jncc.gov.uk/site/UK0030075

[15] https://naturalresources.wales/media/670697/afon-gwyrfai-a-llyn-cwellyn-management-plan-_english_.pdf

[16] https://www.nature.scot/sites/default/files/special-protection-area/8463/conservation-and-management-advice.pdf

[17] https://cdn.cyfoethnaturiol.cymru/675726/anglesey-terns-pspa-draft-conservation-objectives-final.pdf?rmode=pad&v=1d3a0ee989ea230

	Arctic tern		
Bae Ceredigion/ Cardigan Bay SAC	Bottlenose dolphin Grey Seal	See footnote[18]	Disturbance/Collision Risk (Vessel)
Berwyn SPA	Red kite Hen harrier Merlin Peregrine falcon	See footnote[19]	Collision Risk
Bowland Fells SPA	Hen harrier Merlin Lesser black-backed gull	See footnote[20]	Collison Risk
Bristol Channel Approaches/	Harbour porpoise	See footnote[21]	Disturbance/Collision Risk

[18] https://cdn.cyfoethnaturiol.cymru/sakleojf/final-r37-cardigan-sac.pdf

[19] https://cdn.cyfoethnaturiol.cymru/670888/Berwyn%20man%20plan%20(E)%20(table%20revis%2010.09.09).pdf

[20] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9005151&SiteName=bowland%20fells&SiteNameDisplay=Bowland%20Fells%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA=1&NumMarineSeasonality=0&SiteNameDisplay=Bowland%20Fells%20SPA#hlco

[21] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK0030396&SiteName=bristol%20channel&SiteNameDisplay=Bristol%20Channel%20Approaches%20/%20Dynesfeydd%20M%C3%B4r%20Hafren%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

Dynesfeydd Môr Hafren SAC			
Buchan Ness to Collieston Coast SPA	Northern fulmar Black-legged kittiwake Seabird assemblage	See footnote[22]	Collion risk and barrier to species movement and displacement
Calf of Eday SPA	Northern fulmar Seabird assemblage	See footnote[23]	Collision and disturbance/displacement and barriers to species movement
Canna and Sanday SPA	Common guillemot	See footnote[24]	Disturbance/displacement/ barriers to species movement
Cape Wrath SPA	Northern fulmar Black-legged kittiwake Common guillemot Razor Bill Seabird assemblage	See footnote[25]	Collision risk Disturbance/displacement/ barriers to species movement

[22] https://sitelink.nature.scot/site/8473

[23] https://sitelink.nature.scot/site/8478

[24] https://sitelink.nature.scot/site/8480

[25] https://sitelink.nature.scot/site/8481

Copeland Islands SPA	Manx shearwater	See footnote[26]	Disturbance/displacement/ barriers to species movement
Copinsay SPA	Northern fulmar Seabird assemblage	See footnote[27]	Collision risk and Disturbance/displacement/ barriers to species movement
Coquet Island SPA	Common tern Seabird assemblage	See footnote[28]	Collision risk
Dee Estuary/Aber Dyfrdwy SAC	River lamprey Sea lamprey	See footnote[29]	Underwater noise and suspended sediments
East Caithness Cliffs SPA	Northern fulmar Black-legged kittiwake Seabird assemblage	See footnote[30]	Collision Risk Disturbance/displacement/ barriers to species movement
Fair Isle SPA	Northern fulmar	See footnote[31]	Collision risk

[26] https://www.daera-ni.gov.uk/sites/default/files/publications/doe/copeland-islands-SPA-conservation-objectives-2015.pdf

[27] https://sitelink.nature.scot/site/8485

[28] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9006031&SiteName=coquet%20island&SiteNameDisplay=Coquet%20Island%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[29] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK0030131&SiteName=dee%20estuary&SiteNameDisplay=Dee%20Estuary/%20Aber%20Dyfrdwy%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[30] https://sitelink.nature.scot/site/8492

[31] https://sitelink.nature.scot/site/8496

	Great skua Seabird assemblage		Disturbance/displacement/ barriers to species movement
Farne Islands SPA	Seabird assemblage	See footnote[32]	None?
Fetlar SPA	Northern fulmar Great skua Seabird assemblage	See footnote[33]	Collision risk Disturbance/displacement/ barriers to species movement
Flamborough and Filey Coast SPA	Northern gannet Black-legged kittiwake Seabird assemblage	See footnote[34]	Collision risk Disturbance/displacement/ barriers to species movement
Flannan Isles SPA	Northern fulmar Leach's storm-petrel Common guillemot Atlantic puffin	See footnote[35]	Collision risk Disturbance/displacement/ barriers to species movement

[32] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9006021&SiteName=farne%20islands&SiteNameDisplay=Farne%20Islands%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[33] https://sitelink.nature.scot/site/8498

[34] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9006101&SiteName=flamborough&SiteNameDisplay=Flamborough%20and%20Filey%20Coast%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[35] https://sitelink.nature.scot/site/8502

	Seabird assemblage		
Forth Islands SPA	Northern gannet Atlantic puffin Seabird assemblage	See footnote[36]	Collision risk Disturbance/displacement/ barriers to species movement
Foula SPA	Northern fulmar Great skua Red-throated diver Atlantic puffin Seabird assemblage	See footnote[37]	Collision risk Disturbance/displacement/ barriers to species movement
Fowlsheugh SPA	Northern fulmar Black-legged kittiwake Seabird assemblage	See footnote[38]	Collision risk Disturbance/displacement/ barriers to species movement
Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island (ACBI) SPA	Manx shearwater	See footnote[39]	Disturbance/displacement/ barriers to species movement

[36] https://sitelink.nature.scot/site/8500

[37] https://sitelink.nature.scot/site/8504

[38] https://sitelink.nature.scot/site/8505

[39] https://cdn.cyfoethnaturiol.cymru/xa4g5mgg/condition-assessment-for-aberdaron-coast-and-bardsey-island-spa.pdf

Gogledd Môn Forol/ North Anglesey Marine SAC	Harbour porpoise	See footnote[40]	Potential for connectivity?
Gorllewin Cymru Forol/ West Wales Marine SAC	Harbour porpoise	See footnote[41]	Potential for connectivity?
Grassholm SPA	Northern gannet	See footnote[42]	Collision risk Disturbance/displacement/ barriers to species movement
Handa SPA	Northern fulmar Great skua Black-legged kittiwake Common guillemot Razorbill Seabird assemblage	See footnote[43]	Collision risk Disturbance/displacement/ barriers to species movement

[40] https://cdn.cyfoethnaturiol.cymru/691805/north-anglesey-marine-conservation-objectives-and-advice-on-operations.pdf

[41] https://cdn.cyfoethnaturiol.cymru/691803/west-wales-marine-conservation-objectives-and-advice-on-operations.pdf

[42] https://cdn.cyfoethnaturiol.cymru/674134/grassholm-spa-management-plan-21-1-408-english.pdf

[43] https://sitelink.nature.scot/site/8511

Hermaness, Saxa Vord and Valla Field SPA	Northern gulmar Great skua Northern gannet	See footnote[44]	Collision risk Disturbance/displacement/ barriers to species movement
Hoy SPA	Red-throated diver Northern fulmar Great skua Seabird assemblage	See footnote[45]	Collision risk Disturbance/displacement/ barriers to species movement
Isles of Scilly SPA	European shag Lesser black-backed gull Great black-backed gull	See footnote[46]	Collision risk Disturbance/displacement/ barriers to species movement
Larne Lough Ramsar site	Sandwich tern	N/A	Collision risk
Larne Lough SPA	As above	See footnote	As above
Leighton Moss Ramsar site	Waterbird assemblage Wetland bird assemblage	N/A	Collision risk

[44] https://sitelink.nature.scot/site/8512

[45] https://sitelink.nature.scot/site/8513

[46] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9020288&SiteName=Isles%20of%20Scilly&SiteNameDisplay=Isles%20of%20Scilly%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

			Disturbance/displacement/ barriers to species movement
Liverpool Bay / Bae Lerpwl SPA	Red-throated diver Black (common) scoter Little gull Common tern	See footnote[47]	Collision risk Disturbance/displacement/ barriers to species movement
Martin Mere Ramsar site	Tundra swan Whooper swan Pink-footed goose Eurasian teal Nothern pintail Eurasian wigeon Waterbird assemblage	N/A	Collision risk
Martin Mere SPA	As above	See footnote[48]	As above
Mersey Estuary Ramsar site	Great crested grebe Common Shelduck	N/A	Collision risk

[47] https://www.daera-ni.gov.uk/sites/default/files/publications/doe/larne-lough-spa-conservation-objectives-2015.pdf

[48] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9005111&SiteName=martin%20mere&SiteNameDisplay=Martin%20Mere%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

	Eurasian wigeon Eurasian teal Northern pintail Ringed plover European golden plover Grey plover Northern lapwing Eurasian curlew Common redshank Black-tailed godwit Dunlin Waterbird assemblage		Disturbance/displacement/ barriers to species movement
Mersey Estuary SPA	As above	See footnote[49]	As above
Mersey Narrows and North Wirral Foreshore Ramsar site	Bar-tailed godwit Litte gull Black-tailed godwit Red knot	N/A	Collision risk

49 https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9005131&SiteName=mersey%20Estuary&SiteNameDisplay=Mersey%20Estuary%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

	Common tern Waterbird assemblage		
Mersey Narrows and North Wirral Foreshore SPA	As above	See footnote[50]	As above
Migneint-Arenig-Dduallt SPA	Hen harrier Merlin Peregrin falcon	See footnote[51]	Collision risk
Mingulay and Berneray SPA	Northern fulmar Common guillemot Razorbill Seabird assemblage	See footnote[52]	Collision risk Disturbance/displacement/ barriers to species movement
Morecambe Bay and Duddon Estuary Ramsar site	Little egret Whooper swan Pink-footed goose	N/A	Collision risk Disturbance/displacement/ barriers to species movement

[50] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9020287&SiteName=mersey%20narrows&SiteNameDisplay=Mersey%20Narrows%20and%20North%20Wirral%20Foreshore%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[51] https://cdn.cyfoethnaturiol.cymru/672797/MigneintADd%20WES32%20plan%20English.pdf

[52] https://sitelink.nature.scot/site/8545

	Common shelduck Northern pintail Eurasian oystercatcher Ringed plover European golden plover Grey plover Ruff Red knot Sanderling Bar-tailed godwit Eurasian curlew Common redshank Ruddy turnstone Mediterranean gull Lesser black-backed gull Black-tailed godwit Dunlin Herring gull Sandwich tern Common tern		

	Seabird assemblage Waterbird assemblage		
Morecambe Bay and Duddon Estuary SPA	As above	See footnote[53]	As above
North Caithness Cliffs SPA	North fulmar Black-legged kittiwake Seabird assemblage	See footnote[54]	Collision risk Disturbance/displacement/ barriers to species movement
North Channel SAC	Harbour porpoise	See footnote[55]	Potential for connectivity
North Colonsay and Western Cliffs SPA	Black-legged kittiwake Common guillemot Seabird assemblage	See footnote[56]	Collision risk Disturbance/displacement/ barriers to species movement
North Pennine Moors SPA	Hen harrier	See footnote[57]	Collision risk

[53] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9020326&SiteName=morecambe%20bay&SiteNameDisplay=Morecambe%20Bay%20and%20Duddon%20Estuary%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[54] https://sitelink.nature.scot/site/8554

[55] https://sac.jncc.gov.uk/site/UK0030399

[56] https://sitelink.nature.scot/site/8555

[57] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9006272&SiteName=North%20Pennine%20Moors%20&SiteNameDisplay=North%20Pennine%20Moors%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

	Merlin Peregrin falcon European golden plover		
North Rona and Sula Sgeir SPA	Northern fulmar Leach's storm-petrel Northern gannet Seabird assemblage	See footnote[58]	Collision risk Disturbance/displacement/ barriers to species movement
Noss SPA	Northern fulmar Great skua Northern gannet Seabird assemblage	See footnote[59]	Collision risk Disturbance/displacement/ barriers to species movement
Pen Llŷn a`r Sarnau/ Lleyn Peninsula and the Sarnau SAC	Bottlenose dolphin Grey seal	See footnote[60]	Potential for connectivity
Rathlin Island SPA	Black-legged kittiwake Common guillemot	See footnote[61]	Collision risk

[58] https://sitelink.nature.scot/site/8558

[59] https://sitelink.nature.scot/site/8561

[60] https://cdn.cyfoethnaturiol.cymru/j4kl4iic/final-r37-pen-llyn-sac.pdf

[61] https://www.daera-ni.gov.uk/protected-areas/rathlin-island-spa

	Razorbill Seabird assemblage		Disturbance/displacement/ barriers to species movement
Ribble and Alt Estuaries Ramsar site	Lesser black-backed gull	N/A	Collision risk
Ribble and Alt Estuaries SPA	As above	See footnote[62]	As above
River Dee and Bala Lake/Afon Dyfrdwy a Llyn Tegid SAC	Atlantic salmon Sea lamprey River lamprey	See footnote[63]	Underwater Noise Suspended sediments
River Derwent and Bassenthwaite Lake SAC	Atlantic salmon Sea lamprey River lamprey Brook lamprey	See footnote[64]	Underwater Noise Suspended sediments

62 https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9005103&SiteName=ribble&SiteNameDisplay=Ribble%20and%20Alt%20Estuaries%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

63 https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK0030252&SiteName=river%20dee&SiteNameDisplay=River%20Dee%20and%20Bala%20Lake%20/%20Afon%20Dyfrdwy%20a%20Llyn%20Tegid%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

64 https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK0030253&SiteName=derwent&SiteNameDisplay=River%20Derwent%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

River Eden SAC	Atlantic salmon Sea lamprey River lamprey Brook lamprey	See footnote[65]	Underwater Noise Suspended sediments
River Ehen SAC	Atlantic salmon Sea lamprey River lamprey	See footnote[66]	Underwater Noise Suspended sediments
Ronas Hill - North Roe and Tingon Ramsar site	Red-throated diver Great skua	N/A	Collision risk Disturbance/displacement/ barriers to species movement
Ronas Hill - North Roe and Tingon SPA	As above	See footnote[67]	As above
Rousay SPA	Northern fulmar Seabird assemblage	See footnote[68]	Collision risk

[65] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK0012643&SiteName=river%20eden&SiteNameDisplay=River%20Eden%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[66] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK0030057&SiteName=river%20ehen&SiteNameDisplay=River%20Ehen%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[67] https://sitelink.nature.scot/site/8572

[68] https://sitelink.nature.scot/site/8573

			Disturbance/displacement/ barriers to species movement
Rum SPA	Manx shearwater	See footnote[69]	Disturbance/displacement/ barriers to species movement
Sgomer, Sgogwm a Moroedd Penfro/ Skomer, Skokholm and the Seas off Pembrokeshire SPA	Manx shear water European storm-petrel Common guillemot Razorbill Atlantic puffin Lesser black-backed gull Seabird assemblage	See footnote[70]	Collision risk Disturbance/displacement/ barriers to species movement
Sheep Island SPA	Great cormorant	See footnote[71]	Disturbance/displacement/ barriers to species movement

[69] https://sitelink.nature.scot/site/8574

[70] https://cdn.cyfoethnaturiol.cymru/673958/Skomer.Skokholm%20management%20plan%2007.pdf

[71] https://www.daera-ni.gov.uk/protected-areas/sheep-island-spa

Shell Flat and Lune Deep SAC	Sandbanks which are slightly covered by sea water all the time	See footnote[72]	Suspended sediment Smothering Re-mobilisation of contaminated sediments Changes to water quality
Shiant Isles SPA	Northern fulmar Common guillemot Razorbill Atlantic puffin Seabird assemblage	See footnote[73]	Collision risk Disturbance/displacement/ barriers to species movement
Sir Benfro Forol/ Pembrokeshire Marine SAC	Grey Seal	See footnote[74]	Potential for connectivity
Solway Firth SAC	Sea lamprey River lamprey	See footnote[75]	Underwater noise Suspended sediments

[72] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK0030376&SiteName=shell%20flat&SiteNameDisplay=Shell%20Flat%20and%20Lune%20Deep%20SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[73] https://sitelink.nature.scot/site/8575

[74] https://cdn.cyfoethnaturiol.cymru/1dvplkee/pembrokeshire-marine-sac-condition-assessment.pdf

[75] https://sitelink.nature.scot/site/8377

Solway Firth SPA	Red-throated diver Great cormorant Whooper swan Pink-footed goose Barnacle goose Common shelduck Eurasian teal Northern pintail Northern shoveler Greater scaup Black (common) scoter Common golden eye Goosander Eurasian oystercatcher Ringed plover European golden plover Grey plover Northern lapwing	See footnote[76]	Collision risk

[76] https://sitelink.nature.scot/site/10487

	Red knot Sanderling Bar-tailed godwit Eurasian curlew Common redshank Ruddy turnstone Black-headed gull Mew gull Herring gull Dunlin		
South Pennine Moors Phase 2 SPA	Merlin European golden plover Short-eared owl	See footnote[77]	Collision risk
St Kilda SPA	Northern fulmar Manx shearwater	See footnote[78]	Collision risk Disturbance/displacement/ barriers to species movement

[77] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9007022&SiteName=south%20pennine&SiteNameDisplay=South%20Pennine%20Moors%20Phase%202%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&HasCA=1&NumMarineSeasonality=0&SiteNameDisplay=South%20Pennine%20Moors%20Phase%202%20SPA

[78] https://sitelink.nature.scot/site/8580

	Leach's storm-pretrel Great skua Common guillemot Atlantic puffin Northern gannet Seabird assemblage		
Strangford Lough Ramsar site	Sandwich tern Common tern	N/A	Collision risk
Strangford Lough SPA	As above	See footnote[79]	As above
Strangford Lough SAC	Harbour seal	See footnote[80]	Potential for connectivity
Sule Skerry and Sule Stack SPA	Leach's storm-petrel Northern gannet Common guillemot Atlantic puffin Seabird assemblage	See footnote[81]	Collision risk Disturbance/displacement/ barriers to species movement

[79] https://www.daera-ni.gov.uk/protected-areas/strangford-lough-spa

[80] https://www.daera-ni.gov.uk/publications/strangford-lough-sac

[81] https://sitelink.nature.scot/site/8581

Sumburgh Head SPA	Northern fulmar Seabird assemblage	See footnote[82]	Collision risk Disturbance/displacement/ barriers to species movement
The Dee Estuary Ramsar site	Common shelduck Eurasian teal Northern pintail Eurasian oystercatcher Grey plover Red knot Bar-tailed godwit Eurasian curlew Common redshank Sandwich tern Black-tailed godwit Dunlin Common tern Waterbird assemblage	N/A	Disturbance/displacement/ barriers to species movement

[82] https://sitelink.nature.scot/site/8582

The Dee Estuary SPA	As above	See footnote[83]	As above
Traeth Lafan/ Lavan Sands, Conway Bay SPA	Great crested grebe Red-breasted merganser Eurasian oystercatcher Eurasian curlew Common redshank	See footnote[84]	Collision risk
Treshnish Isles SPA	European storm-petrel	See footnote[85]	Collision risk Disturbance/displacement/ barriers to species movement
Troup, Pennan and Lion's Heads SPA	Northern fulmar Black-legged kittiwake Seabird assemblage	See footnote[86]	Collision risk Disturbance/displacement/ barriers to species movement
West Westray SPA	Northern fulmar Black-legged kittiwake	See footnote[87]	Collision risk

[83] https://designatedsites.naturalengland.org.uk/ConservationAdvice.aspx?SiteCode=UK9013011&SiteName=dee%20estuary&SiteNameDisplay=The%20Dee%20Estuary%20SPA&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=

[84] https://cdn.cyfoethnaturiol.cymru/674184/Traeth%20Lafan%20SAC%20Plan%2021[1].4.08%20English.pdf

[85] https://sitelink.nature.scot/site/8586

[86] https://sitelink.nature.scot/site/8587

[87] https://sitelink.nature.scot/site/8589

	Seabird assemblage		Disturbance/displacement/ barriers to species movement
Ynys Seiriol/ Puffin Island SPA	Great cormorant	See footnote[88]	Collision risk
Transboundary Sites			
Ballaugh Curragh Ramsar	Hen Harrier	N/A	Collision risk Disturbance/displacement/ barriers to species movement
Lambay Island SPA	Guillemot Puffin Fulmar Lesser black-backed gull Kittiwake Razorbill Herring gull Shag Cormorant	See footnote[89]	Collision risk Disturbance/displacement/ barriers to species movement

[88] https://cdn.cyfoethnaturiol.cymru/674189/Ynys%20Seiriol%20SPA%20%20management%20Plan%20v18%20April%20%20(English).pdf

[89] https://www.npws.ie/protected-sites/spa/004069

Ireland's Eye SPA	Kittiwake Razorbill Cormorant	See footnote[90]	Collision risk Disturbance/displacement/ barriers to species movement
Wicklow Head SPA	Kittiwake	See footnote[91]	Collision risk Disturbance/displacement/ barriers to species movement
Saltee Islands SPA	Puffin Fulmar Gannet Kittiwake Guillemot Shag Cormorant Razorbill	See footnote[92]	Collision risk Disturbance/displacement/ barriers to species movement
Horn Head to Fanad Head SPA	Fulmar	See footnote[93]	Collision risk

[90] https://www.npws.ie/protected-sites/spa/004117

[91] https://www.npws.ie/protected-sites/spa/004127

[92] https://www.npws.ie/protected-sites/spa/004002

[93] https://www.npws.ie/protected-sites/spa/004194

	Kittiwake Shag Cormorant		Disturbance/displacement/ barriers to species movement
West Donegal Coast SPA	Fulmar Shag Cormorant	See footnote[94]	Collision risk Disturbance/displacement/ barriers to species movement
Tory Island SPA	Fulmar	See footnote[95]	Collision risk Disturbance/displacement/ barriers to species movement
Cliffs of Moher SPA	Fulmar Guillemot Kittiwake Razorbill	See footnote[96]	Collision risk Disturbance/displacement/ barriers to species movement
Stags of Broad Haven SPA	Leach's petrel	See footnote[97]	Collision risk Disturbance/displacement/ barriers to species movement

[94] https://www.npws.ie/protected-sites/spa/004150

[95] https://www.npws.ie/protected-sites/spa/004073

[96] https://www.npws.ie/protected-sites/spa/004005

[97] https://www.npws.ie/protected-sites/spa/004072

Clare Island SPA	Fulmar	See footnote[98]	Collision risk Disturbance/displacement/ barriers to species movement
Duvillaun Islands SPA	Fulmar	See footnote[99]	Collision risk Disturbance/displacement/ barriers to species movement
High Island, Inishshark and Davillaun SPA	Fulmar	See footnote[100]	Collision risk Disturbance/displacement/ barriers to species movement
Kerry Head SPA	Fulmar	See footnote[101]	Collision risk Disturbance/displacement/ barriers to species movement
Cruagh Island SPA	Manx shearwater	See footnote[102]	Collision risk Disturbance/displacement/ barriers to species movement

[98] https://www.npws.ie/protected-sites/spa/004136

[99] https://www.npws.ie/protected-sites/spa/004111

[100] https://www.npws.ie/protected-sites/spa/004144

[101] https://www.npws.ie/protected-sites/spa/004189

[102] https://www.npws.ie/protected-sites/spa/004170

Dingle Peninsula SPA	Fulmar	See footnote[103]	Collision risk Disturbance/displacement/ barriers to species movement
Iveragh Peninsula SPA	Fulmar	See footnote[104]	Collision risk Disturbance/displacement/ barriers to species movement
Blasket Islands SPA	Fulmar Manx shearwater Puffin Lesser black-backed gull	See footnote[105]	Collision risk Disturbance/displacement/ barriers to species movement
Deenish Island and Scarriff Island SPA	Fulmar Manx shearwater	See footnote[106]	Collision risk Disturbance/displacement/ barriers to species movement
Puffin Island SPA	Fulmar Manx shearwater	See footnote[107]	Collision risk Disturbance/displacement/ barriers to species movement

[103] https://www.npws.ie/protected-sites/spa/004153

[104] https://www.npws.ie/protected-sites/spa/004154

[105] https://www.npws.ie/protected-sites/spa/004008

[106] https://www.npws.ie/protected-sites/spa/004175

[107] https://www.npws.ie/protected-sites/spa/004003

	Puffin		
The Bull and The Cow Rocks SPA	Gannet	See footnote[108]	Collision risk Disturbance/displacement/ barriers to species movement
Skelligs SPA	Gannet Manx shearwater Fulmar Puffin	See footnote[109]	Collision risk Disturbance/displacement/ barriers to species movement

[108] https://www.npws.ie/protected-sites/spa/004066

[109] https://www.npws.ie/protected-sites/spa/004007

Author: Energy Infrastructure Planning, Department for Energy Security and Net Zero

Date: 01 December 2025