Department for Energy Security & Net Zero

Habitats Regulations Assessment for an Application Under the Planning Act 2008

MORGAN OFFSHORE WIND PROJECT: 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

Department for Energy Security and Net Zero (2025)

Contents

List of abbreviations

Term	Abbreviation
(draft) Development Consent Order	(d)DCO
Adverse Effect on Integrity	AEoI
Appropriate Assessment	AA
Department of Energy Security and Net Zero	DESNZ
Deemed Marine Licence	DML
Environmental Impact Assessment	EIA
Examining Authority	ExA
Habitats Regulations Assessment	HRA
Interested Parties	IPs
Imperative reason of Overriding Public Interest	IROPI
Joint Nature and Conservation Committee	JNCC
Kilometre	km
Lowest Astronomical Tide	LAT
Likely Significant Effect	LSE
Marine Management Organisation	MMO
Marine Mammal Mitigation Protocol	MMMP
Megawatts	MW
National Site Network	NSN
Nationally Significant Infrastructure Project	NSIP
Natural England	NE
Offshore Substation Platform	OSP
Preliminary Environmental Information	PEIR
Planning Inspectorate	PINS
Relevant Representation	RR
Report on the Implications for European Sites	RIES
Report to Inform Appropriate Assessment	RIAA

Special Area of Conservation	SAC
Supplementary Advice on Conservation Objectives	SACO
Special Protection Area	SPA
Statement of Common Ground	SoCG
Statutory Nature Conservation Body	SNCB
The Royal Society for the Protection of Birds	RSPB
Unexploded Ordnance	UXO

1 Introduction

1.1 Background

This is a record of the Habitats Regulations Assessment (HRA) that the Secretary of State for the Department of Energy Security and Net Zero (DESNZ) has undertaken under the Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations) (as amended) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (the Offshore Habitats Regulations) (as amended) in respect of the Development Consent Order (DCO) and Deemed Marine Licences (DMLs) for the Morgan Offshore Wind Project: Generation Assets and associated infrastructure (the Project).

The Examining Authority (ExA) in its report describes 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 would comprise the construction and operation of an offshore wind farm with an approximate capacity of 1500 megawatts (MW) in the Irish Sea awarded as part of the Round 4 Offshore Wind Licensing Arrangements, approximately 58.5km from the Anglesey coastline and within the UK’s Exclusive Economic Zone (EEZ). The Project is described in more detail in Section 2.

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 100MW.

The Project was accepted for Examination by the Planning Inspectorate (PINS) on 17 May 2024 and a three-member Panel of Inspectors was appointed as the ExA for the Application. The Examination of the Project application began on 10 September 2024 and completed on 10 March 2025. The ExA submitted its report of findings and conclusions of the Examination, including its recommendation (the ExA’s Report), to the Secretary of State on 29 May 2025. Numbered references to the ExA’s Report are presented in the format “[ER *.*.*]”.

1.2 Habitats Regulations Assessment (HRA)

The Habitats Regulations and the Offshore 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 miles (nm) limit of territorial waters. Beyond territorial waters, the Offshore Habitats Regulations serve the same function for the UK’s offshore marine area. The Secretary of State notes the Project covers areas within and outside the 12 nm limit, so both sets of Regulations apply and hereafter will be referred to collectively as the Habitats Regulations.

The Habitats Regulations provide for the designation of sites for the protection of habitats and species of international importance. These sites are called Special Areas of Conservation (SACs). They 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 form part of the UK's National Site Network (NSN).

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

Candidate SACs (cSACs), SACs and SPAs are afforded protection as protected sites. As a matter of policy[1] the Government affords potential SPAs (pSPAs) the same level of protection.

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 [IROPI], the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

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

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

And that:

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

This Project is not directly connected with, or necessary to, the management of a protected site. The Habitats Regulations require that, where the Project is likely to have a significant effect (LSE) on any such site, alone or in-combination with other plans and projects, an appropriate assessment (AA) is carried out to determine whether the Project will have an adverse effect on

[1] NPS EN-1 para 5.3.9

the integrity (AEoI) of the site in view of that site's conservation objectives. In this document, the following assessments are collectively referred to as the HRA:

- Stage 1: Assessment of LSE;
- Stage 2: AA to determine whether there is an AEoI of a 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 HRA published by the Planning Inspectorate (2017) (Advice Note 10)[2] , the European Commission (2018)[3], joint guidance by Defra, NE, the Welsh Government and Natural Resources Wales (2021) on 'Habitats Regulations Assessment: protecting a European site' (the "2021 joint guidance)[4].

1.3 Site Conservation Objectives

Where an AA is required in respect of a protected site, regulation 63(1) of the Habitats Regulations (and regulation 28(1) of the Offshore Habitats Regulations) requires that it be an assessment 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 Natural England (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 adverse effect on integrity is likely to be one which prevents

[2] The Planning Inspectorate (2017): *Advice Note Ten: Habitats Regulations Assessment Relevant to Nationally Significant Infrastructure Projects.*

[3] European Commission (2019), Directorate-General for Environment, Managing Natura 2000 sites – The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Publications Office, 2019: https://data.europa.eu/doi/10.2779/02245

[4] Defra, NE, the Welsh Government and Natural Resources Wales (2021) 'Habitats Regulations Assessment: protecting a European site': https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site

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

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[6] advises that HRAs should use the generic objectives and apply them to the site-specific situation. For SPAs, the overarching objective is to avoid the deterioration of the habitats of qualifying features, and the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving the aims of the 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 for all the SACs for which a LSE was identified by the Applicant at the point of the DCO application were included within the HRA Stage 2 SAC Report [APP-097]. Initially the Applicant only provided conservation objectives for the SPA and Ramsar sites that reached Step 2 of the integrity test in [APP-098]. In response to a question from the ExA, the Applicant subsequently provided conservation objectives for all the sites for which an LSE has

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

been identified [REP4-030]. The Applicant identified several SPAs and SACs in the UK NSN in an unfavourable condition. The conservation objectives for Liverpool Bay SPA were provided by the Applicant in [REP5-036]. This document stated that the wintering population of red-throated divers within the Liverpool Bay SPA is in unfavourable condition.

The HRA Stage 2 SAC Report [APP-097] noted that condition assessments were not available for the following SACs:

- River Derwent and Bassenthwaite Lake SAC
- Solway Firth SAC
- North Anglesey Marine/ Gogledd Môn Forol SAC
- North Channel SAC
- Murlough SAC
- The Maidens SAC
- Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC
- Lundy SAC
- Isles of Scilly Complex SAC

The Applicant confirmed [REP3-006] that it was not aware that condition assessments had become available since the submission of the application for Annex II marine mammals and diadromous fish as features of the SACs identified in the preceding paragraph. This was confirmed by NE [REP3-048] and NRW [REP3-051]. NRW also stated that they were not likely to be available during the course of the Examination.

In response to the Secretary of State's first consultation letter dated 19 June 2025, NRW[7] noted new conservation advice packages and condition assessments[8] have recently been produced for some Welsh SPAs and SACs for marine ornithology and mammals. These updates have been taken into account by the Secretary of State in this HRA.

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 (RIES) statutory consultation

Under Regulation 63(3) of the Habitats Regulations and Regulation 28(4) of the Offshore Habitats Regulations the competent authority must, for the purposes of an AA, consult the Statutory nature conservation body (SNCB) and have regard to any representation made by that body within such reasonable time as the authority specifies.

[7] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010136/EN010136-001117-Morgan%20OWF%20Information%20Request%20June%202025%20NRW%20response.pdf

[8] https://naturalresources.wales/guidance-and-advice/environmental-topics/wildlife-and-biodiversity/protected-areas-of-land-and-seas/condition-assessments-for-welsh-european-marine-sites-ems/?lang=en

The Project is located in the Irish Sea within UK waters. The Applicant's HRA Stage 1 Screening Report [APP-099], revised in [REP6-067] identified protected sites within the UK NSN that are located within England, Wales, Scotland and Northern Ireland for consideration within the assessment.

NE and Natural Resources Wales (NRW) registered as IPs and participated in the Examination. The Joint Nature Conservation Committee (JNCC) did not register as an IP, with NE's Relevant Representation (RR) [RR-026] explaining that NE is authorised to exercise the JNCC's functions as a statutory consultee in respect of applications for offshore renewable energy installations in offshore waters (0-200nm) adjacent to England (including the application for the project). JNCC participated in the Examination from Deadline (D) 3 onwards in relation to non-English sites for which it has joint or sole responsibility.

In its Rule 6 letter the ExA wrote to NatureScot and the DAERA of Northern Ireland inviting them to the preliminary meeting as 'Other Persons' [PD-001]. The ExA in its first and second written questions [PD-004 and PD-009] specifically asked NatureScot and DAERA to confirm whether they were content with the outcomes of the Applicant's HRA Report for the relevant non-English sites. Neither NatureScot or DAERA has responded or submitted any representations to the Examination.

The ExA was mindful throughout the Examination [ER C.1.6] of the need to ensure that the Secretary of State has such information as may reasonably be required to carry out their duties as the competent authority. The ExA sought evidence from the Applicant and the relevant Interested Parties (IPs), including NE, Natural Resources Wales (NRW), NatureScot, Northern Ireland's Department of Agriculture, Environment and Rural Affairs (DAERA) and the Joint Nature Conservation Committee (JNCC) as the Statutory Nature Conservation Bodies (SNCB), through written questions and Issue Specific Hearings (ISHs).

The ExA, with support from the Inspectorate's Environmental Services Team, produced a Report on the Implications for European Sites (the RIES) [PD-020]. The purpose of the RIES was to compile, document and signpost information submitted by the Applicant and IPs during the examination (up until 16 January 2025). 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.

Consultation on the RIES took place between 6 February 2025 and 27 February 2025. Comments on the RIES were received from the Applicant [REP6-013], NE [REP6-105], NRW [REP6-101], JNCC [REP6-104] and the Marine Management Organisation (MMO) [REP6-094] at D6.

Several Examination submissions at D6 and D7 included HRA-relevant information. NE [REP6-105] noted that the RIES did not take account of this information and recommended that the RIES be updated and included within the ExA's Report to the Secretary of State. NE advised that consultation on the RIES did not adequately discharge the statutory requirement to consult NE on appropriate assessments [REP6-105]. Given the amount of HRA information submitted following publication of the RIES, the ExA suggested [ER C.1.28] the Secretary of State may wish to undertake further consultation to fulfil the duties under Regulation 63(3) of the Habitats Regulations and Regulation 28(4) of the Offshore Habitats Regulations.

For the avoidance of doubt, the Secretary of State considers all representations made by all IPs on HRA matters throughout the entirety of the Examination and Decision stages. He does not rely solely on consultation on the RIES and consultation on it, to inform his conclusions on matters relevant to the HRA, but does consider that the RIES can formally support his duties to consult on AAs. In this instance, the Secretary of State notes the late-stage provision of information relating to the HRA and NE's concern during Examination regarding the Secretary of State's duty to consult. The Secretary of State considers that the further consultation issued since the close of Examination, including consulting with NE as the SNCB, in addition to the extensive consultation undertaken during Examination have adequately fulfilled his duties to consult on the AA under Regulation 63(3) of the Habitats Regulations and Regulation 28(4) of the Offshore Habitats Regulations. The Secretary of State has taken into account the representations of NE[9], JNCC[10] and NRW[7] in response to the consultation letter.

1.5 Documents referred to in this HRA

This HRA has taken account of, and should be read in conjunction with, documents produced as part of the Application and Examination, together with the responses to the Secretary of State's requests for comments and further information which are available on the PINS NSIP web page[11]. In particular:

- The ExA's Report;
- The RIES [PD-011];
- HRA Stage 2 Information to Support an Appropriate Assessment (ISAA) Part 1: Introduction [APP-096];
- ISAA Part 2: SAC assessments [APP-097] ('the HRA Stage 2 SAC Report') and addendum titled:
    - Assessment of impacts on non-ornithological features of proposed Ramsar sites within the Isle of Man [REP5-006]
- ISAA Part 3: SPA and Ramsar site assessments ('the HRA Stage 2 SPA Report') [APP-098, revised in REP6-066] and two addenda titled:
    - Consideration of impacts on ornithological features of Ramsar sites on the Isle of Man [REP5-005]; and
    - Liverpool Bay/ Bae Lerpwl SPA Clarification Note [REP5-036].
- The HRA Report is supported and informed by several Environmental Statement (ES) appendices referred to therein [APP-050 to APP-058];
- HRA Stage 1 Screening Report [APP-099], revised in [REP6-067];
- HRA Integrity Matrices [APP-100]; and

[9] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010136/EN010136-001122-EN010136%20-%20Morgan%20Offshore%20Wind%20Farm%20Generation%20Assets%20Request%20for%20Further%20Information%2019.06.25%20-%20Natural%20England%20Response%20516471.pdf

[10] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010136/EN010136-001119-EN010136%20JNCC%20Response%20to%20SoS%20Request.pdf

[11] https://infrastructure.planninginspectorate.gov.uk/projects/yorkshire-and-the-humber/hornsea-project-four-offshore-wind-farm/

- Responses to the Secretary of State's consultation letters, issued on:
  - 19 June 2025[12]; and
  - 18 July 2025[13].

Plus, other information submitted during the Examination and during the Secretary of State's consideration of the Application. Several documents were revised during pre-Examination and Examination, as detailed in the Application Guide [REP7-002]. The Secretary of State has considered and assessed these documents, and key information from these documents is summarised in this report.

No SoCG was submitted with NE. NE noted in its response to the ExA's Rule 6 letter [PD1-020] that due to resourcing issues it would focus instead on a Principal Areas of Disagreement Summary Statement (PADSS) and a Risk and Issues Log, both of which were initially submitted as part of its RR [RR-026] and Written Representation [REP1-053] and updated throughout the Examination (with [AS-015] being the final PADSS and [AS-016] being the final Risk and Issues Log). In response to the Secretary of States consultation letter dated 19 June 2025, NE confirmed that it had no further comments on the Applicants D6 representations, and that its advice in NE's D6 submissions [AS-014] [AS-015] [AS-016] remain.

[12] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010136/EN010136-001116-Morgan%20Offshore%20Wind%20Farm%20-%20Information%20Request%20-%20June%202025%20signed.pdf

[13] https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010136/EN010136-001141-Morgan%20Offshore%20Wind%20Farm%20-%20All-IP%20Consultation%20-%2018%20July%202025.pdf

2 Project description

The project description is presented in Chapter 3 of the Environmental Statement [REP6-024].

The Morgan Array Area (i.e. the area within which the offshore wind turbines will be located) is 280 km^2 in area and is located 22.22 km (12 nm) from the Isle of Man coastline, 37.2 km (20.1 nm) from the northwest coast of England and 58.5 km (31.6 nm) from the Welsh coastline (Anglesey) (when measured from Mean High Water Springs (MHWS)). The Morgan Array Area is located wholly within English offshore waters (beyond 12 nm from the English coast).

The Morgan Generation Assets will be comprised of up to 96 wind turbines. The offshore infrastructure will also include up to 390 km of inter-array cables and 60 km of inter-connector cables. The key components of the Morgan Generation Assets include:

- Offshore wind turbines
- Foundations (for wind turbines and Offshore Substation Platforms (OSPs))
- OSPs
- Scour protection
- Cable protection
- Inter-array cables linking the individual wind turbines to the OSPs
- High Voltage Alternating Current transmission system including:
    - OSPs and their foundations
    - Offshore interconnector cable(s).

The final design for the Project may 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 Design Scenarios provide sufficient flexibility within the project whilst ensuring that the environmental effects of the Project eventually constructed has been properly assessed. The realistic worst-case design scenarios assessed are outlined by the Applicant in its Report to Inform Appropriate Assessment [APP-059].

The ExA (ExQ1 HRA 1.3 [PD-004]) queried whether the HRA had assessed the worst-case scenario and requested assurances that the impacts of greater magnitude than have been assessed would not occur. The ExA noted the HRA assesses up to 96 wind turbines with a maximum diameter of 250m and a maximum blade tip above Lowest Astronomical Tide (LAT) of 293m. Schedule 2 of the draft DCO [REP2-011] allows up to 96 turbines with a maximum rotor diameter of 320m and maximum blade tip height above LAT of 364m. The Applicant responded [REP3-006] that the maximum design scenario involves the highest number of turbines and the largest physical footprint, consistent with previous offshore wind farm applications. To prevent building 96 turbines with the maximum rotor diameter (320m), the maximum rotor swept area (RSA) was specified in the draft DCO (Schedule 2, Requirement 2(2), Table 1) [REP7-007].

The Secretary of State does not consider the response fully addressed the ExA's query. Whilst securing the RSA of 5,468,884m2 does limit the turbine number and sizes to a maximum number and diameter as in Scenario 2, the collision risk modelling assumes 96 turbines with a 250m diameter (Scenario 1), which has a smaller RSA of 4,712,389m2. Therefore, in theory, the DCO Schedule 1 allows for 96 turbines each with a diameter of 269m to be constructed. To prevent

that possibility, the Secretary of State has amended DCO Schedule 2 Requirement 2 to make it clear that the parameters in Table 2 of Schedule 1 do not allow works that give rise to any materially new or different environmental effects to those identified in the Environmental Statement based upon the two assessed scenarios set out in Table 3.5 of the Environmental Statement [REP6-024].

The Secretary of State is satisfied that the Applicants HRA Report is based upon the realistic worst-case design scenario of the project for each parameter in accordance with PINS Advice Note Nine[14].

2.1 Construction programme

An indicative construction programme was provided in Table 3.24 of the Project Description ES chapter [REP6-024]. This indicated the anticipated construction timescales for the various elements of the Project. Construction is currently planned to commence in 2026 and take up to 4 years.

The final construction programme will be submitted to the Marine Management Organisation (MMO) under condition 20 of DML 1 (Wind Turbine Generators and Associated Infrastructure) and condition 20 of DML 2 (Offshore Substation Platforms and Interconnector Cables) in the draft DCO. The construction programme must include details of:

(i) the proposed construction start date;
(ii) proposed timings for mobilisation of plant delivery, materials, and installation works; and
(iii) an indicative written construction programme for all wind turbine generators and offshore substation platforms forming part of the authorised scheme and licenced activities, unless otherwise agreed in writing with the MMO.

The final ‘as-built’ parameters must be submitted to the MMO under condition 31 of DML 1.

2.2 Project location

The Morgan Array Area (is 58.5 km (31.6 nm) from the Anglesey coastline, 37.13 km (20.1 nm) from the northwest coast of England, and 22.22 km (12 nm) from the Isle of Man (when measured from MHWS) (Figure 1). The Morgan Array Area provided at Preliminary Environmental Information Report (PEIR) has been minimised, where possible, to reduce potential impacts on several receptors including (as set out in ES Volume 1, Chapter 4: Site selection and consideration of alternatives [AP-011]).

[14] https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-nine-rochdale-envelope/

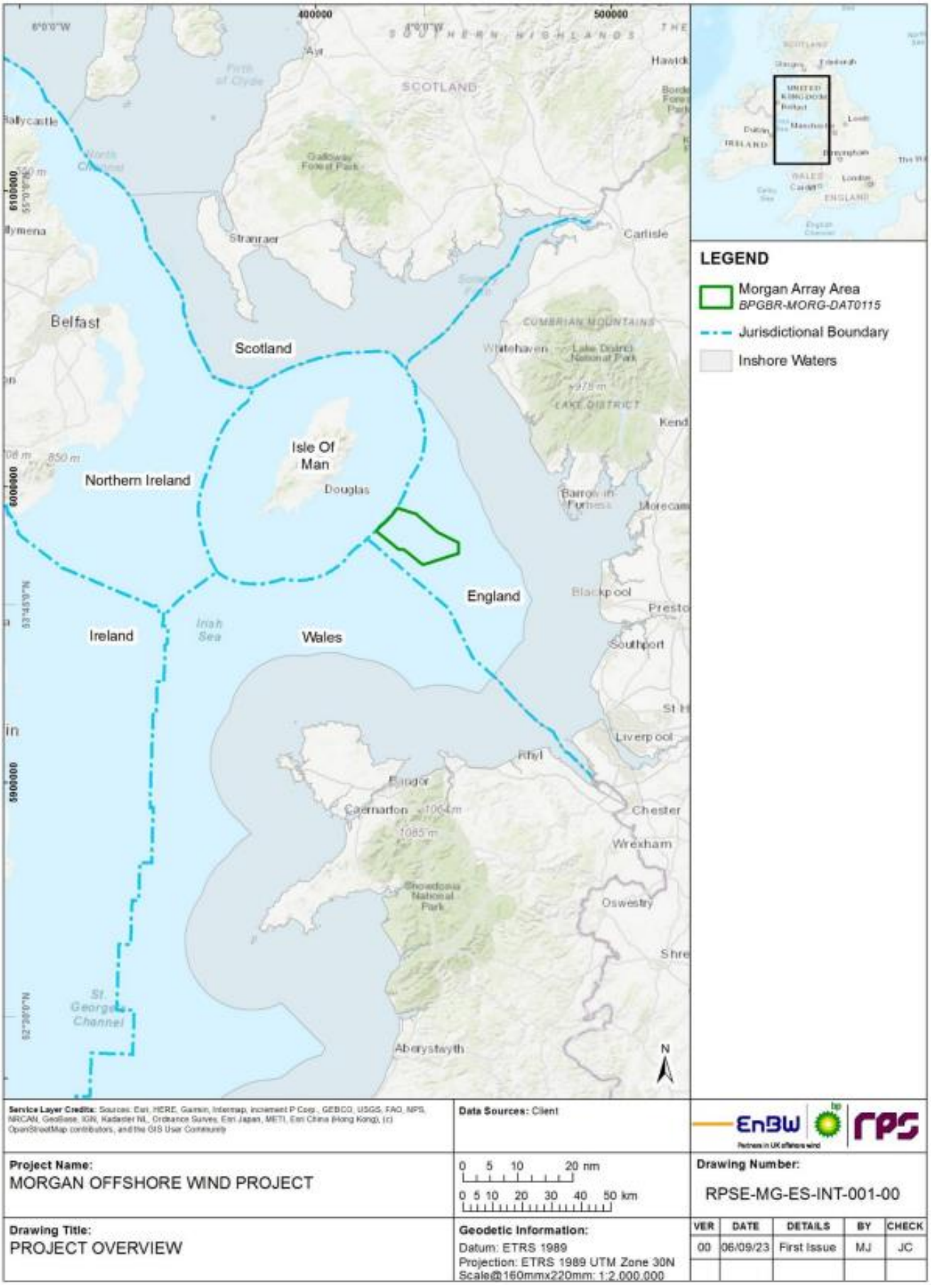

Figure 1: Location of the Project.

2.3 Changes to the Application during Examination and post-Examination

No changes that fell outside of the Rochdale Envelope were made during the Examination.

3 Stage 1: Screening for Likely Significant Effects

Under Regulation 63 of the Habitats Regulations and Regulation 28 of the Offshore Habitats Regulations, the Secretary of State must consider whether a development 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.

Section 1.3 of the HRA Stage 1 Screening Report [APP-099], revised in [REP6-067] describes the methodology used to identify 71 protected sites within the UK NSN for inclusion within the assessment, as detailed in the following tables:

- Table 1.4: Protected sites designated for Annex II diadromous fish species (9 sites shown on Figure 2)
- Table 1.5: Protected sites designated for Annex II marine mammals (15 sites shown on Figure 3)
- Table 1.17: Protected sites designated for offshore ornithological features (47 sites shown on Figure 4)

No protected sites designated for Annex I habitats or onshore ornithological features were identified for inclusion in the assessment. This was not disputed by any IPs during the Examination.

LSE on several protected sites were excluded [ER C.2.8]. In addition to the features identified in the HRA Stage 1 Screening Report, NRW raised [RR-027], [REP1-056] that waterbird assemblages were also qualifying features of the Dee Estuary Ramsar site, Burry Inlet Ramsar site and Severn Estuary Ramsar site, and recommended that the Applicant include an assessment for each assemblage feature. In response, the Applicant confirmed [PD1-017] that its conclusion of no LSE for all features of Dee Estuary Ramsar site, Burry Inlet Ramsar site and Severn Estuary Ramsar site also applied to the waterbird assemblage features at those sites. The Applicant explained [REP2-005] that it had considered assemblage features within the Stage 1 and 2 assessments [APP-099], revised in [REP6-067], and [APP-098], revised in [REP6-066]. The Applicant stated that in all cases, conclusions of no adverse effect had been reached with these conclusions also considered applicable to the assemblage feature as a whole [REP2-005].

Aside from this, the Applicant's conclusions of no LSE with respect to the sites mentioned above were not explicitly disputed in the Examination. The ExA was content that an LSE on those sites can be excluded.

As reported in paragraphs 2.1.6 to 2.1.8 of the RIES [PD-011], NE [RR-026] [REP1-053] and NRW [RR-027] [REP2-026] considered that Liverpool Bay SPA should also have been identified for inclusion in the Stage 1 and 2 assessments. This was due to potential disturbance and displacement impacts from vessel movements in the construction or operation and maintenance (O&M) phases on the red-throated diver and common scoter qualifying features. The Applicant's Addendum [REP5-036] to the HRA Stage 2 SPA Report submitted at D5 presented Stage 1 and 2 assessments for the Liverpool Bay SPA. Potential LSEs (alone and in-combination) were identified for the red-throated diver, common scoter and waterbird assemblage qualifying

features of Liverpool Bay SPA [REP5-036]. A screening matrix for Liverpool Bay SPA was provided in Appendix A of [REP5-036].

Aside from the Liverpool Bay SPA, no additional protected sites within the UK NSN were identified by IPs for inclusion within the screening assessment.

In respect of offshore ornithology, as reported in Table 2.4 of the RIES, NRW [RR-027] and JNCC [REP3-035] considered there were errors in the qualifying features for the Skomer, Skokholm, and seas off Pembrokeshire SPA, noting some species were components of the seabird assemblage. The Applicant [PD1-017] explained it is standard practice to treat assemblage features as standalone and confirmed all features identified by NRW were considered in the HRA Stage 1 Screening Report, with several progressing to Stage 2 assessment. Agreement was subsequently reached with NRW on this matter in [AS-012].

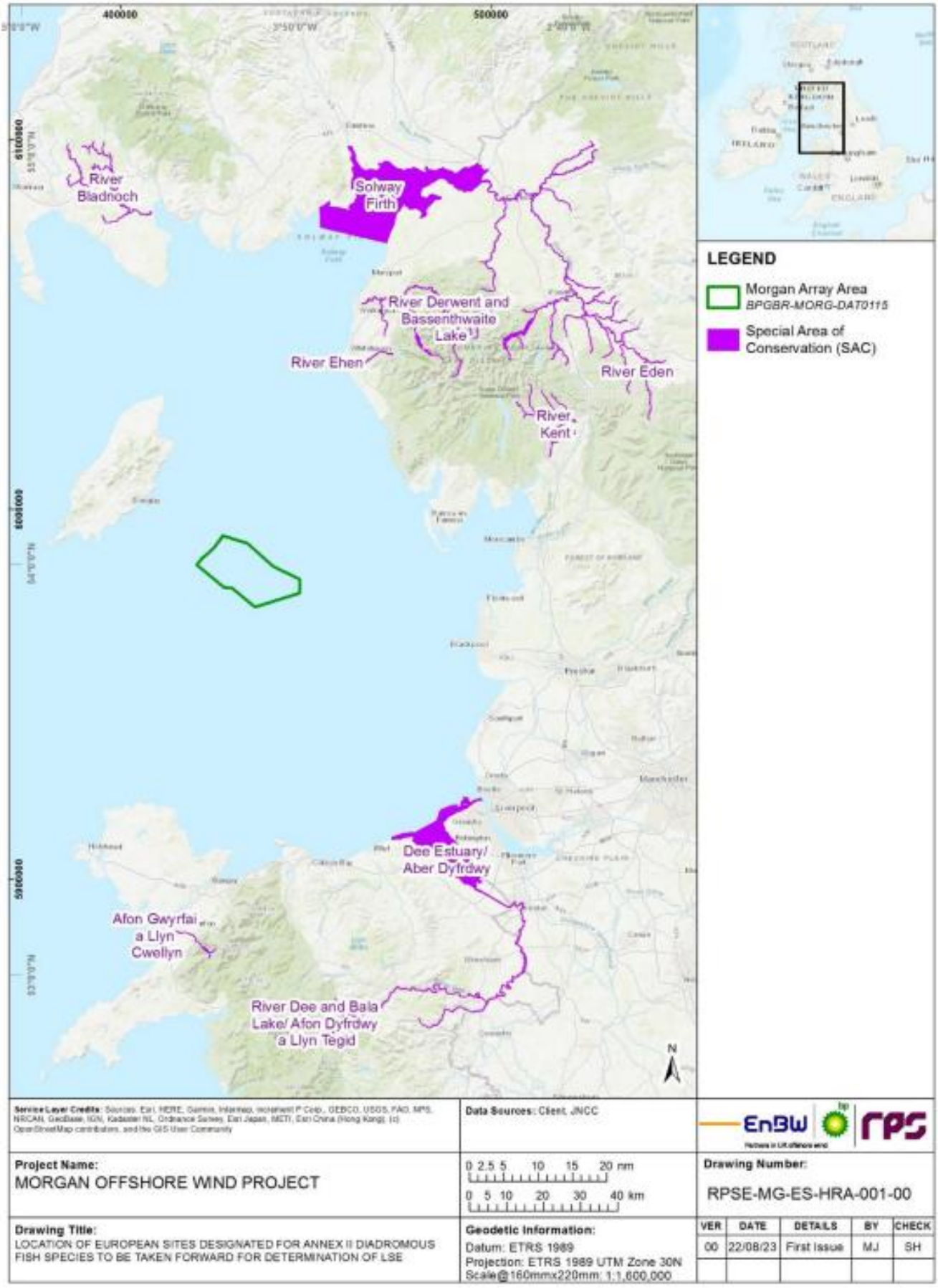

Figure 2: Protected sites designated for diadromous fish considered for LSE

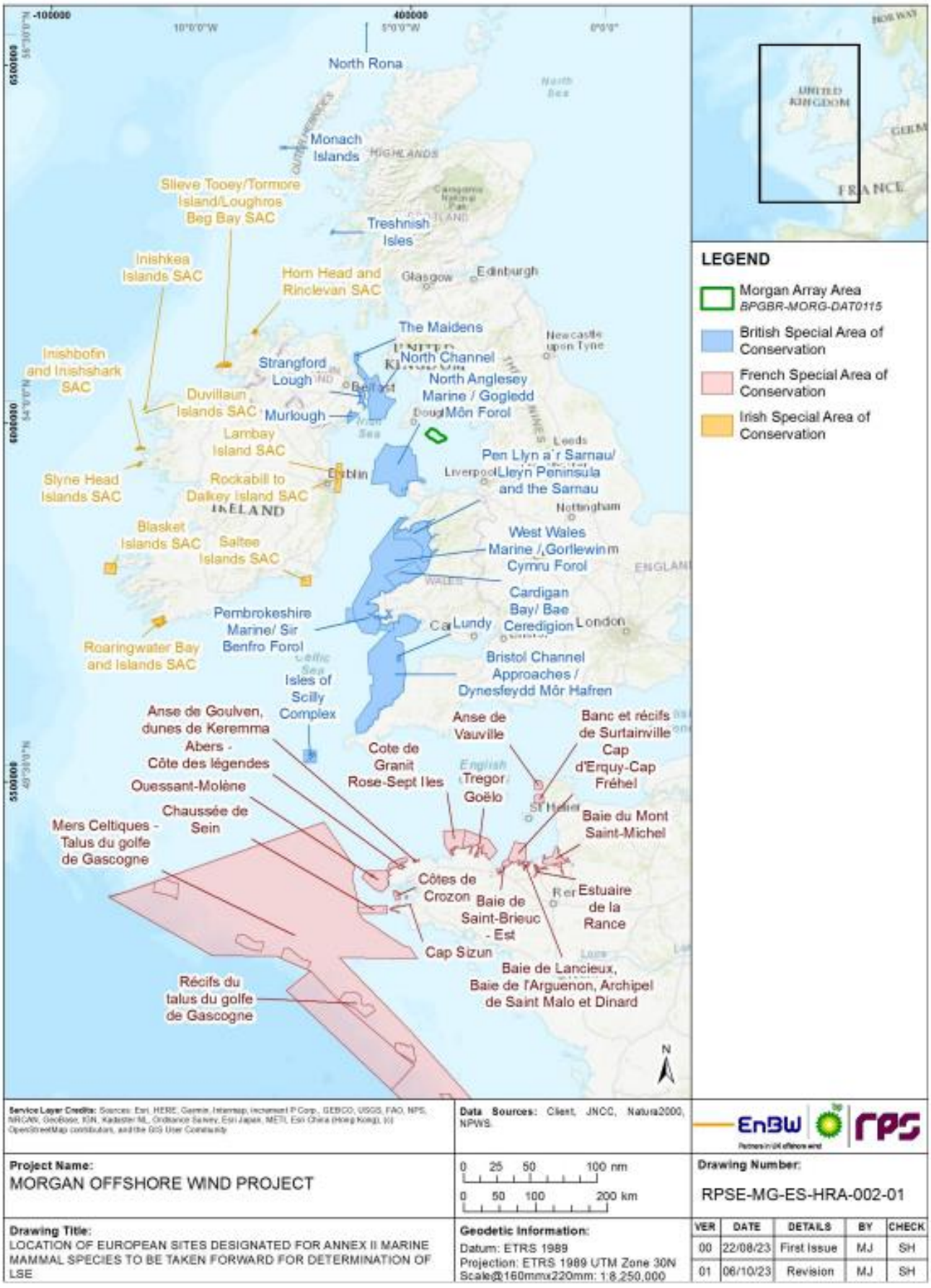

Figure 3: Protected sites designated for marine mammals considered for LSE

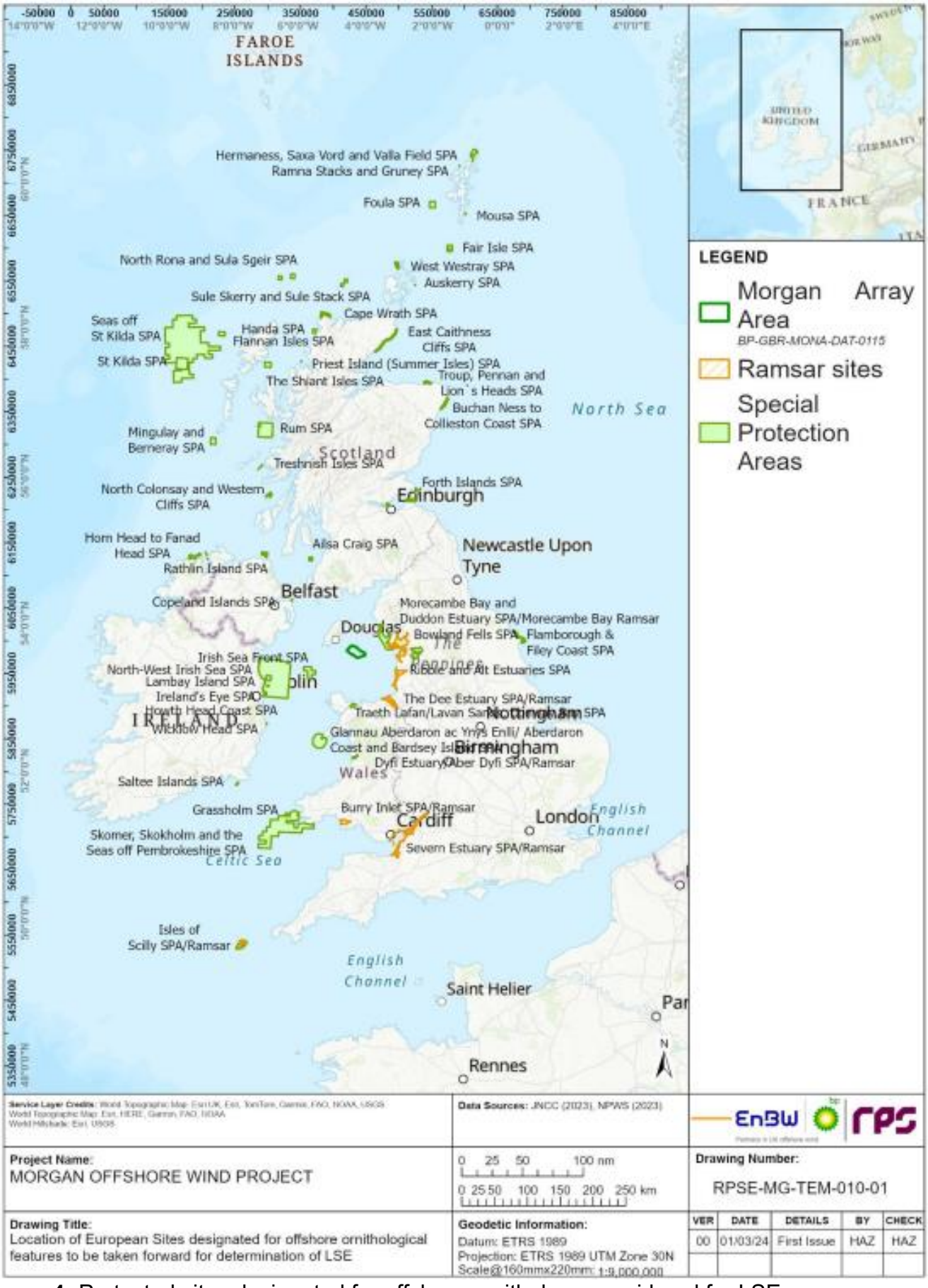

Figure 4: Protected sites designated for offshore ornithology considered for LSE

The HRA Stage 1 Screening Report [REP6-067] detailed the potential impact pathways from the project during construction, O&M and decommissioning. The impact pathways from the Project alone are summarised in Table 1 below. The screening matrices within the HRA Stage 1 Screening Report detail which impact pathways were considered for each protected site and qualifying feature (in other words, those greyed out were not assessed by the Applicant). The ExA [PD-004] sought justification for screening out operational phase barrier effects. The Applicant [REP2-022] and [REP3-006] explained that the likelihood of barrier effects was low due to seabirds' large foraging ranges and distances from the Morgan Array Area. NRW [REP3-051] and NE [REP5-080] agreed with this assessment. No additional effect pathways were identified for inclusion in the assessment during the Examination.

Table 1: Pathways for LSE assessed by the Applicant

Receptor group	LSE pathway
Annex II diadromous Fish (see Section 1.4.3 of [APP-099], revised in [REP6-067])	• temporary habitat loss/ disturbance • increases in suspended sediment concentrations (SSC) and sediment deposition • underwater sound impacting fish • long-term habitat loss • Electromagnetic Fields (EMF) • colonisation of hard structures • disturbance/ remobilisation of sediment-bound contaminants • accidental pollution
Annex II marine Mammal (see Section 1.4.4 of [APP-099], revised in [REP6-067])	• injury and disturbance from underwater sound generated from piling • injury and disturbance from underwater sound generation from unexploded ordnance (UXO) detonation • underwater sound from pre-construction site investigation surveys • underwater sound from vessels, other vessel activities and other (non-piling) sound producing activities • vessel collision risk • changes in prey availability • increased SSC and associated sediment deposition • accidental pollution • operational sound • EMF
Offshore ornithological (see Section 1.4.5 of [APP-099], revised in [REP6-067])	• temporary habitat loss/ disturbance and increased SSC • disturbance and displacement from airborne sound and presence of vessels and infrastructure • changes in prey availability • accidental pollution • permanent habitat loss/ disturbance and increased SSC • collision risk • barrier to movement

The HRA Stage 1 Screening Report [REP6-067] also identified the following non-UK protected sites for inclusion within the assessment:

- Republic of Ireland and 17 French sites designated for Annex II marine mammal qualifying features
- Seven Republic of Ireland sites designated for offshore ornithological features;
- The Isle of Man is not covered by the Habitats Regulations but is part of the Ramsar convention. As reported in paragraphs 2.1.16 to 2.1.19 of the RIES, the ExA considered how effects on the following Ramsar and proposed (p) Ramsar sites located on the Isle of Man had been addressed by the HRA documentation:
    - Ballaugh Curragh Ramsar site
    - Central Valley Curragh pRamsar site
    - Dalby Peatlands pRamsar site
    - Gob ny Rona, Maughold Head and Port Cornaa pRamsar site
    - Southern Coasts and Calf of Man pRamsar site
    - The Ayres pRamsar site

Table 1.110 [APP-099], revised in [REP6-067] identifies the non-UK protected sites, qualifying features and potential impacts for which the Applicant concluded LSE.

NE's final risks and issues log [AS-016] and PADSS [AS-015] do not raise any objections to the Applications LSE assessment and conclusions.

The Secretary of State has considered the potential effects of the Application on all relevant qualifying features of the protected sites listed above, with consideration to their conservation objectives, to determine whether there will be LSEs in the context of the Habitats Regulations and the Offshore Habitats Regulations. Of all the protected sites identified during Examination, the ExA concluded that LSEs could not be excluded for the sites and their qualifying features in **Error! Reference source not found.**, either alone or in-combination with other plans or projects, based on the final versions of the Applicant's Report to Inform Appropriate Assessment and Screening Matrices [APP-059, REP4-009, REP4-011]. The Secretary of State concludes there could be a LSE from the Project alone or in-combination for the protected sites, including the qualifying features **Error! Reference source not found.** and impact pathways detailed in Table 1.110 of the HRA Stage 1 Screening Report [APP-099], revised in [REP6-067] and in Appendix A of [REP5-036]. The RIES and the Applicant's final HRA Report provide further information on sites and features which were considered, but for which LSE were screened out.

3.1 In-Combination

Under the Habitats Regulations and the Offshore Habitat Regulations, the Secretary of State is obliged to consider whether other plans or projects in-combination with the Project might affect protected sites.

The HRA Screening Report [APP-099], revised in [REP6-067] detailed the Applicant's overarching approach to assessing in-combination effects in Section 1.5.

For ornithology features, the HRA Screening Report stated that it is not necessary to consider in-combination effects at screening stage for sites/ features for which a LSE 'alone' has been

identified; rather it is for those where no LSE was concluded. However, the ExA noted that this was contradicted in numerous screening matrices which state that: “Where the additional mortality associated with the Morgan Generation Assets is zero birds or it has been concluded for the project alone that there is no LSE it is considered that the Morgan Generation Assets will not act in-combination with other plans and projects and therefore no LSE is concluded” (for example Table 1.67 note g [APP-099], revised in [REP6-067]).

In response to ExA questioning, as reported in Table 2.5 of the RIES [PD-011], the Applicant [REP3-006] considered that provision of such an assessment (where this had not been done within the HRA Stage 1 Screening Report) was unnecessary. Due to the highly precautionary approach to the screening of the project alone, the Applicant considered that no additional LSEs were likely to arise as a result of in-combination effects.

The Applicant’s threshold for inclusion of a species within an in-combination assessment was if the Project alone resulted in >0.05% increase in baseline mortality. Where the project alone impact equates to <0.05% baseline mortality, the Applicant has deemed it non-material and within natural fluctuations of the population and it is therefore screened out of in-combination assessment.

NE agreed [REP3-048] that for designated sites within English jurisdiction, the likelihood for an in-combination LSE for any site/ feature where the Applicant has excluded an LSE from the project alone is low. NRW confirmed at D6 that it was content that all in-combination LSEs for Welsh designated sites had been identified by the Applicant and taken forward to assessment [REP6-101].

The ExA [ER C.2.25] was satisfied that all relevant protected sites and potential impact pathways have been identified and assessed by the Applicant. The ExA concludes there would be a LSE from the Project alone or in-combination for the UK protected sites in

Figure 2: Protected sites designated for diadromous fish considered for LSE

Figure 3: Protected sites designated for marine mammals considered for LSE

Figure 4: Protected sites designated for offshore ornithology considered for LSE

, including the qualifying features and impact pathways detailed in Table 1.110 of the HRA Stage 1 Screening Report [APP-099], revised in [REP6-067] and in Appendix A of [REP5-036].

The Secretary of State agrees with the recommendations of the ExA and concludes that LSEs cannot be excluded at the protected sites listed in

Figure 2: Protected sites designated for diadromous fish considered for LSE

Figure 3: Protected sites designated for marine mammals considered for LSE

Figure 4: Protected sites designated for offshore ornithology considered for LSE

. The protected sites are taken forward to the AA to consider whether the Project in-combination with other plans or projects will result in an AEoI of these sites.

Table 2: Protected sites within the UK NSN for which a LSE was identified and carried forward to Appropriate Assessment

Receptor group	Protected sites for which LSE is identified
Annex II diadromous fish	England • River Derwent and Bassenthwaite Lake SAC • River Eden SAC • River Ehen SAC • River Kent SAC Wales • Afon Gwyrfai a Llyn Cwellyn SAC • Dee Estuary/ Aber Dyfrdwy SAC • River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid SAC Scotland • River Bladnoch SAC • Solway Firth SAC
Annex II marine mammal	England • Isles of Scilly Complex SAC • Lundy SAC Wales • Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC • Cardigan Bay/ Bae Ceredigion SAC • North Anglesey Marine/ Gogledd Môn Forol SAC • Pembrokeshire Marine/ Sir Benfro Forol SAC • Pen Llŷn a`r Sarnau/ Lleyn Peninsula and the Sarnau SAC • West Wales Marine/ Gorllewin Cymru Forol SAC Northern Ireland • Murlough SAC • Maidens SAC • North Channel SAC • Strangford Lough SAC
Offshore ornithological features	England • Bowland Fells SPA • Flamborough and Filey Coast SPA • Isles of Scilly SPA • Isles of Scilly Ramsar site • Morecambe Bay and Duddon Estuary SPA • Morecambe Bay Ramsar site • Ribble and Alt Estuaries SPA • Ribble and Alt Estuaries Ramsar site

	Wales • Irish Sea Front SPA • Glannau Aberdaron ac Ynys Enlli/ Aberdaron Coast and Bardsey Island SPA • Grassholm SPA • Skomer, Skokholm and the seas off Pembrokeshire/ Sgomer, Sgogwm a moroedd Benfro SPA
	Scotland • Ailsa Craig SPA • Buchan Ness to Collieston Coast SPA • Cape Wrath SPA • East Caithness Cliffs SPA • Flannan Isles SPA • Handa SPA • Hermaness, Saxa Vord and Valla Field SPA • Mingulay and Berneray SPA • North Colonsay and Western Cliffs SPA • North Rona and Sula Sgeir SPA • Rum SPA • Seas off St Kilda SPA • St Kilda SPA • Sule Skerry and Sule Stack SPA • The Shiant Isles SPA • Troup, Pennan and Lion's Heads SPA • West Westray SPA
	Northern Ireland • Copeland Islands SPA • Forth Islands SPA • Rathlin Island SPA

4 Appropriate Assessment

The requirement to undertake an AA is triggered when a competent authority 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 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[15].

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 adverse effects on the integrity of the features of the protected sites identified can be ruled out as a result of the Project alone or in-combination with other plans or projects in view of the site's conservation objectives and using the best scientific evidence available.

In accordance with the precautionary principle embedded in the integrity test and established through case law[16], 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 adverse effects on integrity (AEoI) of the affected protected sites, 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.

4.1.1 Appropriate Assessment methodology

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 the screening assessment, using best scientific evidence available. The assessment considers the site's

[15] https://www.gov.uk/guidance/appropriate-assessment#what-must-an-appropriate-assessment-contain

[16] CJEU Case C-127/02 Waddenzee 7 September 2004, Reference for a preliminary ruling from the Raad van State (Netherlands) in the proceedings: Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij.

conservation objectives, which are set out in Section 1.3 and subsequent sections of this HRA Report.

The Report to Inform Appropriate Assessment (RIAA) submitted with the application for the Project [APP-059] concluded that the Project could result in an AEoI on the following protected site and qualifying features.

- Greater Wash SPA: in-combination effects of collision impacts on Sandwich tern and combined in-combination impacts from collision and displacement on Sandwich tern.
- North Norfolk Coast SPA: in-combination effects of collision impacts on Sandwich tern and combined in-combination impacts from collision and displacement on Sandwich tern.
- Flamborough and Filey Coast SPA: in-combination effects of collision impacts on kittiwake.

Following discussions with stakeholders during Examination, the RIAA screening assessment was subsequently updated [REP04-009]. The revised RIAA included:

- Flamborough and Filey Coast SPA: Seabird Assemblage screened in.
- Outer Thames Estuary SPA: In-combination effects from displacement caused by vessel traffic.
- Greater Wash SPA and North Norfolk Coast SPA: The removal of displacement effects on Sandwich terns.
- Greater Wash SPA: inclusion of common scoter.
- Moray Firth SAC: Included for disturbance/displacement effects on bottlenose dolphins.
- River Wensum SAC: inclusion of additional features due to impacts arising from, white-clawed crayfish, brook lamprey and bullhead.
- Broadland Ramsar: screened out of any further assessment.

4.1.2 In-combination assessments

The in-combination assessments have taken into account the impact associated with the Morgan Generation Assets together with the Transmission Assets, the Morecambe Offshore Windfarm Generation Assets and other projects and plans. The projects and plans selected as relevant to the in-combination assessment are presented in HRA Stage 2 ISAA – Part 2 SAC assessments, based on the results of the screening exercises for fish and shellfish ecology and marine mammals (as presented in Volume 2, Chapter 3: Fish and shellfish ecology (Document Reference F2.3) and Chapter 4: marine mammals (Document Reference F2.4) of the Environmental Statement) and for ornithology HRA Stage 2 ISAA – Part 3 Special Protection Area (SPA) and Ramsar Site assessments, based on the results of the screening exercises for ornithology (as presented in Volume 2, Chapter 5: Offshore ornithology (Document Reference F2.5) of the Environmental Statement). Each project has been considered on a case-by-case basis for screening in or out of the assessment based upon data confidence, effect-receptor-pathways and the spatial/temporal scales involved.

The in-combination effects assessments are presented in a series of tables (one for each potential in-combination impact) which assess the following three Scenarios:

- Scenario 1: Morgan Generation Assets plus Morgan and Morecambe Offshore Wind Farms: Transmission Assets

- Scenario 2: Morgan Generation Assets plus Morgan and Morecambe Offshore Wind Farms: Transmission Assets and the Morecambe Offshore Windfarm Generation Assets
- Scenario 3: Morgan Generation Assets plus Morgan and Morecambe Offshore Wind Farms: Transmission Assets, alongside all other projects, plans and activities. This assessment has been allocated into 'tiers' reflecting the current stage of the other projects, plans and activities within the planning and development process. This tiered approach is adopted to provide a clear assessment of the Morgan Generation Assets and the Morgan and Morecambe Offshore Wind Farms: Transmission Assets, alongside other projects, plans and activities.

This approach provides a framework for placing relative weight on the potential for each project/plan to be included in the in-combination assessment to ultimately be realised, based upon the project/plan's current stage of maturity and certainty in the project's parameters. The allocation of each project, plan and activity into tiers is not affected by the screening process but is merely a categorisation applied to all projects, plans and activities that have been screened in for assessment. The tiered approach uses the following categorisations:

- Tier 1
  - Under construction
  - Permitted application
  - Submitted application
  - Those currently operational that were not operational when baseline data were collected, and/or those that are operational but have an ongoing impact
- Tier 2
  - Scoping report has been submitted and is in the public domain
- Tier 3
  - Scoping report has not been submitted or is not in the public domain
  - Identified in a relevant development plan
  - Identified in other plans and programmes.

An overview of the projects or activities considered for each receptor group are tabulated separately in each of the receptor chapters according to the effect pathway under consideration.

In relation to the in-combination assessment, NRW [RR-027], [REP1-056] and [REP6-101] requested the Applicant to update the data they had included for the Morecambe Generation Assets Project (Morecambe OWF) from the figures from the PEIR for that project to those in the submission documents for the Project.

At D2, the Applicant submitted a review of the CEA and in-combination assessment [REP2-023], following acceptance of the Morecambe OWF application for Examination in June 2024. This updated Morecambe OWF to a Tier 1 project and confirmed (Tables 1.4 and 1.5) that with the exception of offshore ornithology, there was no change in the conclusions of the cumulative and in-combination assessments for all topics [REP2-023]. Morecambe OWF was subsequently included in the Applicant's review of the CEA and in-combination assessment for offshore ornithology, submitted at D3b [REP3-019]. The submission [REP3-019] concluded that there would be no changes to the conclusions of the in-combination assessments presented in the HRA Stage 2 SPA Report [APP-098, revised in REP6-066].

At D4, the Applicant submitted a further review of the CEA and in-combination assessment, including the Morgan and Morecambe Transmission Assets [REP4-024]. The review concluded

that there was no change to the conclusions of the cumulative and in-combination assessments for all receptor groups.

At D5, NRW stated [REP5-083a] that it had reviewed [REP4-024] and had no comments to make at that time. At D6, the Applicant submitted a further review of the CEA and in-combination assessment [REP6-042]. This considered new projects not previously considered in the CEA that had entered the public domain up to 31 January 2025, and new or updated assessment material that has been published on projects up to 31 January 2025 that had been considered in the CEA. No further comments were received from NRW (or other IPs) on this matter.

The HRA documentation did not include Oriel, North Irish Sea Arra and Arklow Bank Wind Park 2 OWFs in the in-combination assessments for offshore ornithology and Annex II diadromous fish. Meath County Council responded to the Secretary of States transboundary consultation under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 [OD-006] stating applications had been submitted for these three projects. The Applicant's reviews of the CEA and in-combination assessments at D2 [REP2-023] and D3 [REP3-019] considered these three projects, as well as Codling Offshore Wind Farm and Llŷr floating offshore wind project (for which applications had also been submitted). The reviews concluded that there was no change in the conclusions of the cumulative and in-combination assessments for all topics. Meath County Council confirmed at D5 [REP5-100] that it had no further comments to make at that time and submitted no further submissions to the Examination.

4.1.3 Mitigation

The Applicant's HRA Stage 2 Reports identified mitigation measures for each receptor group:

- Annex II diadromous fish species – Tables 1.8 and 1.20 of [APP-097]
- Annex II marine mammals – Tables 1.56 and 1.123 of [APP-097]
- offshore ornithology – Table 1.6 of [APP-098]

These were taken into account in the Applicant's assessment of effects on integrity.

These measures include the development and adherence to a Marine Mammal Mitigation Protocol (MMMP), to be based on the Outline MMMP [REP6-047], in the event that driven or part-driven pile foundations are used. Whilst this protocol was developed primarily to reduce or eliminate the risk of auditory injury effects of underwater sound to marine mammals during construction, the Applicant considered these measures also applicable to fish species.

An Underwater Sound Management Strategy (UWSMS), to be based on the Outline UWSMS [REP6-045], would also be produced prior to piling activities or unexploded ordnance clearance. This would provide a strategy to reduce the magnitude of impacts from elevated underwater sound to marine mammal and fish receptors and would consider both auditory injury and behavioural disturbance.

The Outline MMMP and Outline UWSMS as submitted with the DCO application were updated throughout the Examination in response to comments from the SNCBs and other parties.

Text was added to the Outline MMMP to clarify that Acoustic Deterrent Devices would not be used as a mitigation measure for geophysical surveys (in line with a request from NE [RR-026]) and to reflect the Applicant's response to ExQ1 MM 1.3 [REP3-006] that it was unnecessary for the draft DML Conditions to refer to measures for injurious effects and disturbance from

geophysical activities. NE [REP5-080] and the MMO [REP5-056a] confirmed that they were satisfied with the Applicant's response to ExQ1 MM 1.3. NRW [REP5-083] deferred to the MMO.

NE considered that due to potential impacts on harbour porpoise, appropriate mitigation for underwater sound during Sub-Bottom Profiler (SBP) surveys should be included in the MMMP and UWSMS, following the JNCC guidelines for minimising the risk of injury to marine mammals from geophysical surveys (JNCC, 2017) [RR-026], [REP1-053], [REP3-049]. NE referenced new data collected in Wales which showed that SBP surveys cause marked and prolonged reduction in acoustic porpoise detection. As harbour porpoise are not a qualifying feature of the SACs in English waters which have been considered in the Applicant's assessment of effects on integrity, this matter is not considered further in this Appendix. The ExA has reached a conclusion on the scope and suitability of the Applicant's proposed monitoring for marine mammals in Section 3.8 of this Report.

At D5, in response to stakeholder concerns the Applicant committed to low order UXO clearance only (removing the option of high order UXO clearance from the draft DCO ([REP5-017], now [REP7-007]). The Applicant confirmed (ExQ2 GEN 2.2 and MM 2.8 [REP5-015]) that it would need to apply for a separate Marine Licence should there be a requirement to undertake UXO clearance using high order clearance methods.

Updated documents including the Outline MMMP [REP6-047] and Outline UWSMS [REP6-045] were submitted by the Applicant at D6, to reflect its commitment to the use of noise abatement systems (NAS) as mitigation, in view of the DEFRA noise policy paper published 21 January 2025. These were the final outline versions of these documents. By close of the Examination, NE [AS-015] was content that the Applicant had committed at D6 to the use of NAS in-line with the DEFRA marine noise policy paper (published 21 January 2025), and that a commitment to the use of NAS if piling is required within the DCO was secured.

The submission of the MMMP and UWSMS (in accordance with the Outline MMMP and Outline UWSMS) for approval by the MMO is secured through draft DML Part 2 Conditions 20, 22 and 23 in the final draft DCO [REP7-007]. The final Outline MMMP [REP6-047] and Outline UWSMS [REP6-045] would be certified documents under Schedule 5 of the draft DCO [REP7-007].

Measures to minimise disturbance to marine mammals (and rafting birds) from transiting vessels are described in [REP5-046] and would be included in the Offshore Environmental Management Plan (EMP). An Outline Offshore MP was submitted during the Examination [REP4-018]. Submission of an Offshore EMP, which accords with the outline version, is secured through the draft DMLs (Condition 20) [REP7-007]. The outline Offshore EMP [REP4-018] is included within the list of documents to be certified under Schedule 5 of the draft DCO [REP7-007].

The Applicant provided an Outline Offshore Construction Method Statement (CMS) (incorporating an Outline Cable Specification and Installation Plan (CSIP)) at D4 [REP4-032]. Table 5.3 of the document confirmed that that "The Cable Specification and Installation Plan (CSIP) will include measures for cable burial where possible…", which would avoid adverse effects on Annex II diadromous fish from EMF. Condition 20(1)(d) within the draft DMLs references the Outline Offshore CMS and it is also included within the list of documents to be certified under Schedule 5 of the draft DCO [REP7-007].

In relation to offshore ornithology, the Applicant committed to a minimum lower blade tip height of 34m above LAT to be secured through the draft DCO (Schedule 2 (2) Table 1 [REP7-007]) to

mitigate impacts from collision risk. The conclusions of the assessment also relied on an Offshore EMP as described above, to include measures to minimise disturbance to rafting birds from transiting vessels and a Marine Pollution Contingency Plan.

4.2 Protected sites with diadromous fish qualifying features

The Applicant identified LSEs for 9 sites within the UK NSN designated for Annex II diadromous. The Applicant's assessment of effects on integrity is presented in section 1.5 of the HRA Stage 2 SAC Report [APP-097]. The Applicant concluded that the Project would not result in AEoI of any of the protected sites assessed.

At the close of the Examination, the Applicant's conclusions had not been disputed by any IP in relation to the Annex II diadromous fish features listed in Table 3. The ExA was satisfied that the correct impacts have been assessed for these sites and features, and that the scope of the Applicant's in-combination assessment for Annex II diadromous fish is correct and no additional plans or projects need to be considered.

The ExA was satisfied [ER C.4.78] that on the basis of the information provided, an AEoI on the sites and features listed in Table 3 below can be excluded. The Secretary of State agrees.

Table 3: Protected sites with diadromous fish qualifying features where AEoI can be excluded

Protected site	Qualifying feature(s)	Mitigation required	SNCB advice
River Derwent and Brassenthwaite Lake SAC	Atlantic salmon Sea lamprey River lamprey	• A MMMP, to be based on the Outline MMMP [REP6-047], in the event that driven or part- driven pile foundations be used. Table 1.8 [APP-097] confirmed that the MMMP would include the following measures: ○ the implementation of an initiation stage of a piling soft start and ramp-up ○ minimum and maximum separation limit of 1.4km and 15km, respectively, for concurrent piling ○ maximum hammer energy of 4,400kJ for a single piling event and 3,000kJ for concurrent piling ○ the implementation of a mitigation hierarchy with regard to UXO clearance ○ appropriate mitigation for piling, UXO clearance and some types of	Agreed by NE [RR-026]
River Eden SAC	Atlantic salmon Sea lamprey River lamprey		
River Ehen SAC	Atlantic salmon Freshwater pearl mussel		
River Kent SAC	Freshwater pearl mussel		
Afon Gwyrfai a Llyn Cwellyn SAC	Atlantic salmon		Agreed by NRW [RR-027]
Dee Estuary/ Aber Dyfrdwy SAC	Sea lamprey River lamprey		

River Dee and Bala Lake/ Afon Dyfrdwy a Llyn Tegid SAC	Atlantic salmon Sea lamprey River lamprey	geophysical activities that could potentially lead to injurious effects. • An UWSMS, to be based on the Outline UWSMS [REP6-045], which would also be produced prior to piling activities or unexploded ordnance clearance. • In respect of impacts from EMF, an Offshore CMS including a CSIP. The CSIP would commit to cable burial where possible. An Outline Offshore CMS (incorporating an Outline CSIP) was provided in [REP4-032]. • Development of and adherence to a Decommissioning Programme (to be secured through Schedule 2 of the draft DCO [REP7-007] as a requirement of the Energy Act 2004).	
River Badenoch SAC	Atlantic salmon		N/A – NatureScot did not engage in Examination
Solway Firth SAC	Sea lamprey River lamprey		

4.3 Protected sites with marine mammal qualifying features

The Applicant identified LSEs for 12 sites within the UK NSN designated for Annex II marine mammals. The Applicant's assessment of effects on integrity is presented in section 1.6 of the HRA Stage 2 SAC Report [APP-097]. The Applicant concluded that the Project would not result in AEoI of any of the protected sites assessed.

At the close of the Examination, the Applicant's conclusions had not been disputed by any IP in relation to the marine mammal protected sites and features listed in Table 4. The ExA was satisfied [ER C.4.78] that the correct impacts have been assessed for these sites and features, and that the scope of the Applicant's in-combination assessment for marine mammals is correct and no additional plans or projects need to be considered. The ExA was satisfied that on the basis of the information provided, an AEoI on the sites and features listed below can be excluded.

Table 4: Protected sites with marine mammal qualifying features where no IPs disputed an assessment of no AEoI (Section 1.5 of [APP-097]).

Protected site	Qualifying feature(s)	Mitigation required	SNCB advice
Murlough SAC	Harbour seal	• MMMP and UWSMS as detailed above for Annex II diadromous fish. • Inclusion of measures to minimise disturbance to marine mammals and rafting birds from transiting vessels in an Offshore Environmental Management Plan (EMP), which accords with the outline version [REP4-018]. • Site induction processes to incorporate the principles of the Wildlife Safe (WiSe) Scheme, to be included in the Offshore EMP. • Development of and adherence to a Decommissioning Programme (to be secured through Schedule 2 of the draft DCO [REP7-007] as a requirement of the Energy Act 2004).	N/A – DAERA did not engage in Examination
Maidens SAC	Grey seal		
Strangford Lough SAC	Harbour seal		
North Channel SAC	Harbour porpoise		Agreed by JNCC [REP3-035]

NE and NRW did not initially confirm [RR-026] [RR-027] that they were able to rule out AEoI to some English and Welsh sites and features:

- Lundy SAC (grey seal feature)
- Isles of Scilly Complex SAC (grey seal feature)
- Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC (harbour porpoise feature)
- Cardigan Bay/ Bae Ceredigion SAC (bottlenose dolphin and grey seal features)
- North Anglesey Marine/ Gogledd Môn Forol SAC (harbour porpoise feature)
- Pembrokeshire Marine/ Sir Benfro Forol SAC (grey seal feature)
- Pen Llŷn a`r Sarnau/ Lleyn Peninsula and the Sarnau SAC (bottlenose dolphin and grey seal features)
- West Wales Marine/ Gorllewin Cymru Forol SAC (harbour porpoise feature)

NRW stated [RR-027] that for impulsive noise sources both the Marine Mammals ES Chapter [REP6-031] and HRA Stage 2 SAC Report [APP-097] reference that changes in the impulsive characteristics of impulsive sound at range implies that disturbance thresholds for piling noise should be precautionary at long range (in other words, a few kilometres). NRW did not agree with this conclusion and recommended that this error was rectified [RR-027]. The Applicant responded [PD1-017] that its approach aligned with the latest scientific guidance. NRW subsequently agreed that this issue did not materially affect the conclusions, since assessment results were based on the full modelled range of disturbance [REP1-056].

4.3.1 Sites with bottlenose dolphin qualifying features

LSEs were identified from underwater noise during construction and decommissioning from piling, UXO clearance, pre-construction site investigation surveys and from vessels and other vessel activities. In combination LSE were identified during construction, O&M and decommissioning.

As reported in Table 3.2 of the RIES [PD-011], NRW advised [RR-027] that the bottlenose dolphin populations of Cardigan Bay and Pen Llyn a'r Sarnau SACs are highly connected and that the two protected sites should be considered together. By D1, NRW had agreed (having reviewed the Applicant's response to its concerns in [PD1-017]) that this did not materially impact the conclusions of the application and considered that this matter could be closed [REP1-056].

NRW went on to agree [REP4-044] that AEoI alone and in-combination can be excluded for all the marine mammal qualifying features of the SACs within its remit and that position remained unchanged at Examination close. NRW stated that its agreement in this regard was on the proviso that the UWSMS, MMMP and other post-consent mitigation was secured [REP4-044].

4.3.2 Sites with harbour porpoise and grey seal qualifying features

LSEs were identified from underwater noise during construction and decommissioning from piling, UXO clearance, pre-construction site investigation surveys; and during construction, O&M and decommissioning from vessels and other vessel activities. In combination LSE were identified during construction, O&M and decommissioning.

For harbour porpoise of North Anglesey Marine/ Gogledd Môn Forol SAC, LSEs were also identified from changes in prey availability during construction.

As indicated above, NRW agreed at D4 [REP4-044] that AEoI alone and in-combination can be excluded for all the marine mammal qualifying features of the SACs within its remit, provided the mitigation measures outlined by the Applicant are secured. At D5, NE confirmed [REP5-080] that AEoI alone and in-combination can be excluded for the marine mammal qualifying features of the SACs within its remit (grey seal of the Lundy SAC and Isles of Scilly Complex SAC).

JNCC also concluded [REP3-035], that AEoI could be ruled out for all sites within its remit (harbour porpoise of the Bristol Channel Approaches/ Dynesfeydd Môr Hafren SAC, North Anglesey Marine/ Gogledd Môn Forol SAC and West Wales Marine/ Gorllewin Cymru Forol SAC) on the basis that the measures in the Outline MMMP and Outline UWSMS are sufficient to mitigate the potential impacts.

4.3.3 Isle of Man Ramsar sites

The Applicant's Addendum [REP5-006] to the HRA Stage 2 SAC Report [APP-097] (also provided at D5) presented the assessment of non-ornithological features of the Ballaugh Curragh Ramsar site and pRamsar sites located on the Isle of Man. The addendum identified three additional non-UK sites with marine mammal and fish features for inclusion in the Stage 2 assessment (Gob ny Rona, Maughold Head and Port Cornaa pRamsar site, Southern Coasts and Calf of Man pRamsar site; and The Ayres pRamsar site) as a result of impacts from the Project alone and in-combination with other plans and projects [REP5-006]. An assessment concluding no AEoI was presented in the same document. The Isle of Man Government

(Territorial Sea Committee) confirmed in [REP4-039] and in its final SoCG with the Applicant (Tables 1.7, 1.10 and 1.11 [REP6-079]) that it agreed with the Applicant's conclusions.

4.3.4 Conclusion

The ExA [ER C.4.91] notes the Applicant's commitment to low order UXO clearance and the amendments made to the Outline MMMP and Outline UWSMS during the Examination. The Outline MMMP, Outline UWSMS and Outline Offshore EMP are all certified documents under Schedule 5 of the draft DCO [REP7-007]. Providing that the proposed mitigation measures are adhered to, the ExA concludes that AEoI from the Project can be excluded, both alone and in combination with other plans or projects, on all marine mammal SAC features. The Secretary of State agrees.

4.4 Protected sites with offshore ornithology qualifying features

The Applicant identified LSEs for 33 sites within the UK NSN designated for offshore ornithological features. The Applicant's assessment of effects on integrity was presented in the HRA Stage 2 Report [APP-098], revised in [REP6-066] and the addendum [REP5-036].

The assessment concluded that the Project would not adversely affect the integrity of any of the protected sites and features assessed, either alone or in-combination with other projects or plans. This conclusion relied upon the mitigation measures detailed in Table 1.6 of [APP-098], revised in [REP6-066], as summarised above.

4.4.1 Assessment methodology

Section 1.4.7 and Figure 1.1 of the HRA Stage 2 SPA Report [APP-098], revised in [REP6-066] explained that for SPAs/ Ramsar sites, a two-step process was followed for assessing effects on the integrity of sites for which a LSE was identified. In summary:

- Step 1 – comprised a high-level assessment, based on apportioning data, to identify where there is a low risk of an AEoI (in other words, predicted impacts for the Project alone and/or in-combination cause a <1% increase in the baseline mortality of the latest population estimate for a qualifying feature).
- Step 2 - for sites for which it is predicted that there would be an increase in baseline mortality of particular qualifying features of >1%. It comprised a more detailed assessment, based on CRM and displacement assessments to examine impacts against each conservation objective for the relevant SPAs/ Ramsar sites.

At the point of DCO application, the sites and qualifying features which were taken forward to the Step 2 assessment were:

- Morecambe Bay and Duddon Estuary SPA/ Morecambe Bay Ramsar site – herring gull and breeding seabird assemblage (herring gull component feature)
- Ireland's Eye SPA – kittiwake
- Rathlin Island SPA – breeding seabird assemblage (guillemot component feature) (later corrected by the Applicant – see below)

- Isles of Scilly SPA/ Ramsar site – great black-backed gull (non-breeding season) and breeding bird assemblage (great black-backed gull component feature)
- Cape Wrath SPA – kittiwake and breeding seabird assemblage (kittiwake component feature)
- Flannan Isles SPA – guillemot (non-breeding season) and breeding seabird assemblage (guillemot component feature)
- North-West Irish Sea SPA – kittiwake

Section 1.4.6 of the HRA Stage 2 SPA Report [APP-098], revised in [REP6-066] detailed the Applicant's general approach to the in-combination assessment for SPA/ Ramsar sites. Section 1.4.7 of the HRA Stage 2 SPA Report [APP-098], revised in [REP6-066] stated that where the Project alone represents an impact of <0.05% increase in baseline mortality of the relevant SPA population, it is considered that the impact is not measurable and is within the natural limits of variation and so would not be considered in an in-combination assessment. In-combination assessments therefore were only undertaken for the following UK SPAs/ Ramsar sites and features:

- Morecambe Bay and Duddon Estuary SPA/ Morecambe Bay Ramsar site – in-combination impacts from collision risk during operation and maintenance to herring gull
- Ireland's Eye SPA – in-combination impacts from displacement, collision and their combined effects on kittiwake
- Isles of Scilly SPA/ Ramsar site – in-combination impact from collision risk to great black-backed gull (non-breeding season)
- Flannan Isles SPA – in-combination impact from combined effects from disturbance and displacement from airborne noise, underwater sound, and presence of vessels and infrastructure impacts to guillemot (non-breeding season)
- Cape Wrath SPA – in-combination and collision risk and combined impacts from collision and displacement to kittiwake (it is noted that there is a discrepancy in Table 1.46 of [APP-098] where it states that kittiwake are not progressed to Step 2)

The projects included in the in-combination assessments at the point of DCO application were detailed in Table 1.51 and Figure 1.3 [APP-098].

Several methodological concerns regarding the offshore ornithology assessment were raised by the ExA, NE, JNCC and NRW and subsequently resolved during the Examination, as summarised below. Methodological concerns raised by the RSPB are also summarised below.

The Applicant's updates to the assessment as a result of these concerns resulted in additional SPAs/ features being progressed to Step 2 of the ISAA process, which had previously only been considered at Step 1 of the ISAA process in the HRA Stage 2 SPA Report [APP-098], revised in [REP6-066]:

- Skomer, Skokholm and the Seas off Pembrokeshire/ Sgomer, Sgogwm a moroedd Benfro SPA - guillemot feature
- a number of Scottish SPAs (North Colonsay and Western Cliffs SPA; Handa SPA; St Kilda SPA; Cape Wrath SPA; and Suke Skerry and Sule Stack SPA) – guillemot feature

As a result of the additional Step 2 assessments presented in [REP1-011], there was no change to the overall conclusion of no AEoI reached in the HRA Stage 2 SPA Report [APP-098], revised in [REP6-066].

4.4.1.1 Highly Pathogenic Avian Influenza (HPAI)

The RSPB [RR-035], [REP5-091] raised concerns that the implications of HPAI had not been adequately considered in the HRA assessments and set out the consequences that should be considered in the assessment including the impact on characterisation of the baseline environment, alterations to extent of interactions with wind farms and changes in robustness of protected population to additional mortality. NE [RR-026], [REP1-053] stated that the recent seabird population trends section of the Applicant's Offshore Ornithology Baseline Characterisation [APP-053], revised in [REP1-026] does not consider the impacts of HPAI in the region, but presented this in its Risk and Issues Log only as a note to Examiners and/ or the competent authority and did not add further comment to the Log. The ExA in ExQ1, MO 1.8 [PD-004] sought clarity from the Applicant around how HPAI had been considered and queried whether the RSPB considered any additional information or assessment was required from the Applicant regarding HPAI effects. The Applicant confirmed [REP3-006] that HPAI had been considered in its application documents following NE guidance. It stated that there are no large breeding seabird colonies near the proposed Morgan Generation Assets, so HPAI likely hasn't impacted local populations and the HRA Stage 2 assessments use recent population sizes, considering post-HPAI effects. Few HPAI cases were reported in breeding seabirds in 2024, with some colonies showing improved breeding numbers however, it considers longer datasets are needed to determine HPAI's impact on breeding productivity [REP3-006]. At Examination close, the RSPB's concerns with the impact assessment methodology relating to HPAI remained outstanding [REP5-091], [REP6-086].

4.4.1.2 In-combination assessment - historical projects

NE [RR-026], [REP1-053] and NRW [RR-027], [REP3-051] considered that the Applicant had not included the gap-filled projects in its cumulative and in-combination assessments for offshore ornithology. They pointed out that impacts specified as 'unknown' had been assessed qualitatively but treated as zero, which they considered would underestimate impacts and affect future assessments.

In an effort to resolve these concerns, the Applicant submitted a gap-filling exercise for historic projects [REP1-010] at D1 and its reviews of the cumulative and in-combination assessments at D3 [REP3-019] and D4 [REP4-024]. At D5, the Applicant submitted updated in-combination assessments for impacts on herring gull as a feature of Morecambe Bay and Duddon Estuary SPA, and for great black-backed gull as a feature of the Isles of Scilly SPA [REP5-031], [REP5-032], [REP5-033] (later superseded by [AS-013]), [REP5-034] and [REP5-035]. These included impact values for historical projects that were not included in the original assessment or were assessed qualitatively and have now been calculated in line with the advised approach provided by NE and NRW.

NE [REP5-079] confirmed that this has addressed its concerns. NE's agreement was on the proviso that the figures that the Applicant presented to the Examination at D5, were in accordance with the figures shared with them in advance of D5. The Applicant confirmed at D6 [REP6-013] that the figures were identical. Following submission of the Applicant's updated in-combination assessments, NRW confirmed in [AS-012] that it could conclude no AEoI alone or in-combination for all Welsh SPAs. NRW's agreement in [AS-012] was on the proviso that the updated figures submitted to the Examination by the Applicant [AS-013] are in accordance with

the figures received by NRW on 27 January 2025. The Applicant confirmed at D6 [REP6-013] that the figures were identical.

4.4.1.3 Collision Risk Modelling (CRM)

JNCC [REP3-035] and NRW [REP1-056] did not agree with splitting monthly collision impacts across two different seasons for kittiwake on the basis that it would result in different seasonal impacts being apportioned to SPAs in the HRA. They advised the full breeding season should be used and that other seasons are adjusted accordingly to ensure no months are considered in two seasons. The Applicant acknowledged this and incorporated it into the updated assessments at D5 [REP5-032], [REP5-033] (later superseded by [AS-013]), [REP5-034], and [REP5-035].

There was disagreement between the Applicant [APP-099], [REP3-018], [REP4-009], [REP5-012], NE [RR-026], [REP3-049], RSPB [REP1-057] and NRW [RR-027] over the data used for flight speeds and the use of 95% confidence intervals (upper confidence interval (UCI)) with consultees stating that it did not align with SNCB advice. At D6 NE [REP6-105] confirmed its agreement with the use of the UCI and that its concerns were around the novel screening approach. For other projects requiring compensation, NE generally advises scaling seabird compensatory measures against the 95% value instead of the central impact value (CIV) to ensure that compensatory measures provide sufficient benefit even if impacts exceed the central prediction. However, it considers this to be a minor issue that would not undermine the conclusions of the assessment for the Project. NRW [REP6-083] stated that following discussions with the Applicant, a compromise solution was reached on agreeing the approach in the assessment with the caveat that this approach is suitable for this Project and for impacts from the Project alone and may not be appropriate for all offshore wind cases.

4.4.1.4 Apportionment

NE raised concerns that sabbatical birds had been excluded from assessments during apportioning, advising that integrity judgments should include these birds [RR-026] and impact of sabbatical birds was considered qualitatively and not included in apportioning calculations, aligning with NE's recommendations [PD1-017]. NE was broadly content with this response and advised updating the assessment wording accordingly, considering the matter closed at D3 [REP3-048], [REP3-049] and [REP6-100]. The Applicant clarified that the requested text was already included in the relevant reports, providing cross-references [REP5-015].

NE [RR-026], [REP2-033] and NRW [RR-027], [REP1-056] did not agree with the Applicant's approach to age class apportioning for kittiwakes using a method developed by Hornsea Project Two and advised that a more appropriate approach for age-apportioning kittiwakes in the breeding season would be to use the 84.11% of adults recorded in the Morgan site-specific Digital Aerial Survey data. Alternatively, NE advised taking a precautionary approach and assume all birds are adults. JNCC raised similar concerns [REP3 035].

JNCC [REP3-035] and NRW [REP1-056] also did not agree with splitting monthly collision impacts across two different seasons for kittiwake on the basis that it would result in different seasonal impacts being apportioned to SPAs in the HRA. They advised the full breeding season should be used and that other seasons are adjusted accordingly to ensure no months are considered in two seasons.

The Applicant submitted clarification notes [REP3-020], [REP4-031] in response stating that the preferred approach in assuming all birds are adult class had been used and the conclusions were not affected. NE [REP4-043] and NRW [REP4-044] considered that the correct approach had still not been applied. The Applicant submitted updated impact figures at D5 [REP5-032], [REP5-033] (superseded by [AS-013]), [REP5-034] and [REP5-035] in effort to resolve these concerns.

NRW [REP5-083] confirmed at D5 that the Applicant had updated its assessments accordingly following the SNCB advised approaches for kittiwake apportioning by assuming all birds are adult age class. JNCC confirmed at D5 [REP5-067] that it had no outstanding methodological issues with the application, subject to confirmation that the figures that the Applicant presented to the Examination at D5, were in accordance with the figures shared with them in advance of D5. The Applicant confirmed in [REP6-013] that the figures were identical. NE [REP6-100] confirmed at D6 that it agreed with the impact figures, that the apportioning assessment had used the SNCB advised method for age- apportioning kittiwakes in the breeding season and it considered the issue resolved.

NE [REP1-056] advised that Seabirds Count data should be used for apportioning to colonies in the breeding season and requested an updated assessment to reflect this. The Applicant provided additional information in [REP1-011], [REP1-012] and [REP2-021]. Following further consultation with NE, the Applicant submitted a revised assessment to incorporate apportioning values calculated using data from the Seabirds Count at D5 [REP5-032], [REP5-033] (later superseded by [AS-013]), [REP5-034] and [REP5-035]. NE [REP5-079] confirmed that its concerns have been addressed.

4.4.1.5 Displacement assessments – displacement & mortality rates

NE [RR-026], [REP5-082b], JNCC [REP3-035], RSPB [REP1-057] and NRW [RR-027], [REP1-056] did not consider the Applicant's use of single values of 50% displacement and 1% mortality to be appropriate. They advised that a range of displacement rates (30-70%) and mortality ranges (1-10%) should be considered throughout the assessments.

In updating the assessment, the Applicant identified [REP1-011] additional SPAs/ features to progressed to Step 2 of the ISAA process (as detailed above), but there was no change to the overall conclusion of no AEoI reached in the HRA Stage 2 SPA Report [APP-098], revised in [REP6-066].

NE [REP4-042] and NRW [REP4-044] considered that the comparison of figures between the Applicant's approach versus the SNCB advised approach for the Band model options provided in [REP3-018] is 'stress-testing' and maintained that the required update should be applied. Both parties considered that a site/ feature combination should be taken through to in-combination assessments where the project alone predicted impact exceeds 0.05% of baseline mortality at any scenario across the full range of advised rates.

At D5 the Applicant provided a number of updated assessments [REP5-032], [REP5-033] (superseded by [AS-013]), [REP5-034] and [REP5-035] to align with the recommended methodology including the advised ranges of displacement and mortality rates.

NE [REP6-100] agreed that the Applicant's updated assessments follow an advised methodology and that this matter has been resolved. NRW [REP6-101] confirmed that the

Applicant had presented impacts for the relevant Welsh SPAs covering the full range of NRW advised rates: 30-70% displacement for auks and Manx shearwater and 60-80% displacement for gannet and 1-10% mortality for all species. NRW agreed that AEoI could be ruled out for the project alone and in-combination for all relevant Welsh SPAs. JNCC [REP6-104] confirmed that the appropriate ranges of displacement and mortality have been presented for black-legged kittiwake, Manx shearwater, common guillemot and razorbill.

At Examination close, RSPB [REP6-086] continued to disagree that an AEoI can be ruled out for the great black-backed gull as a feature of the Isles of Scilly SPA from collision and displacement mortality in-combination effects. Due to resource constraints, the RSPB was unable to review and conclude on the information provided by the Applicant at D5 [REP5-032] and [REP5-035].

In his consultation letter dated 18 July 2025, the Secretary of State invited comments from all IPs on information received in response to the previous consultation. No representation was received from the RSPB.

4.4.1.6 Combined displacement & collision risk

4.4.2 Rathlin Island SPA - breeding seabird assemblage

In addition to the overarching methodology concerns detailed above and resolved between NE, NRW and JNCC by the close of Examination, a number of matters relating to specific sites, features or impacts were discussed during the Examination. These are considered below.

There were inconsistencies in the information presented in the HRA Stage 2 SPA Report [APP-098], revised in [REP6-066] regarding whether the breeding seabird assemblage qualifying feature of Rathlin Island SPA had been carried forward to the Step 2 integrity test. ExQ1 HRA 1.7 [PD-004] asked the Applicant to confirm the outcome of the Step 1 integrity test for all features of the Rathlin Island SPA and if necessary, provide the feature account information for the breeding seabird assemblage feature omitted from Section 1.6.2 of [APP-098], revised in [REP6-066].

In response, the Applicant confirmed [REP3-006] that the breeding assemblage of the Rathlin Island SPA did not require consideration in the Step 2 integrity test as the impact from the Project alone on all features that constitute the assemblage represented less than a 0.05% increase in the baseline mortality of the SPA population. The Applicant included this matter in its Errata Sheet [REP3-011]. The ExA [ER C.4.97] considers this matter to be resolved. The Secretary of State agrees.

4.4.3 Sites with Manx shearwater as qualifying features – baseline characterisation

The Applicant calculated regional populations using a method that some IPs did not agree with. The RSPB [RR-035] considered the Applicant's Digital Aerial Survey effort was unlikely to properly characterise the activity of Manx shearwater at the application site. The RSPB stated that it did not have confidence in the baseline densities of Manx shearwater presented, and therefore it was impossible to make any conclusions as to the significance of effects.

NE [RR-026], [REP6-100] advised the regional population figures for Manx shearwater and gannet to be used for the project alone assessment and for all species in the cumulative

assessment but did not consider that this would alter the conclusions of the assessment. The Applicant [REP1-039] considered its surveys to be sufficient and that the appropriate data (including aerial surveys) had been used to inform assessment.

At Examination close, the RSPB [REP6-086] maintained concerns in relation to the baseline survey methods and assessment of Manx shearwater; however, it acknowledged that this concern relates to wider industry limitations rather than a project specific issue. The Applicant [REP7-004] confirmed that baseline characterisation has been undertaken in line with NE's guidance in its response to RRs [PD1-017], that this is not resolvable at a project level, and highlighted that NE, NRW and JNCC conclude [REP5-079], [AS-012] and [REP5-067] agreement of no AEoI from the project alone and in-combination with other plans and projects for all protected sites.

Having had regard to the submissions made, the ExA is satisfied with the baseline characterisation for Manx shearwater. The Secretary of State agrees.

4.4.4 Sites with herring gull as qualifying features – in-combination assessment of collision risk with Awel y Môr

As detailed above, NE [RR-026] expressed concern around the methodology for assessing in-combination effects from collision risk on the basis that it deviated from SNCB advice and that historic impacts had not been taken into account. NRW [REP1-056] raised similar concerns, as well as a concern that for herring gull, the 'extended' Band model Option 3 figures had been included for Awel y Môr in the cumulative and in-combination assessments. It recommended use of Option 2 figures.

The Applicant [PD1-017] confirmed that assessments had used Option 2 for all species for Awel y Môr with the exception of herring gull, for which outputs from Option 3 were used. However, the Applicant stated that use of Option 2 for herring gull would make no difference to the conclusions reached in the ES Offshore Ornithology Chapter [APP-023, revised in REP6-033] and HRA Stage 2 SPA Report [APP-098], revised in [REP6-066].

At D3, the Applicant provided a clarification note [REP3-018] considering the potential impact on the assessment conclusions if collision risk estimates calculated using Option 2 of the Band collision risk model were used instead for herring gull. The Applicant concluded [REP3-018] that there would be no change to the conclusions of no AEoI reached in the HRA Stage 2 SPA Report [APP-098], revised in [REP6-066].

NRW [REP4-044] welcomed the comparison of figures between the Applicant's approach versus the SNCB advised approach for the Band model options provided in [REP3-018]. However, NRW continued to advise that herring gull figures are updated to present Option 2 figures clearly and concisely as the SNCB preferred approach. NRW did accept that the conclusions are unlikely to be materially changed irrespective of approach taken [REP4-044].

At D4, NE considered [REP4-042] that the comparison of figures between the Applicant's approach versus the SNCB advised approach for the Band model options provided in [REP3-018] serves as 'stress-testing' of the Applicant's conclusions and maintained that the required update should be applied.

At D5, the Applicant submitted its updated in-combination collision data [REP5-032], [REP5-033] (later superseded by [AS-013]), [REP5-034] and REP5-035] using the parameters advocated by the SNCBs which included impact values for historical projects that were not previously included.

NE considered [REP5-079] that these updated assessments now aligned with the advised approach provided by NE and NRW. NE agreed that an AEoI could be ruled out for collision effects, alone and in-combination, for all English sites [REP5-079], REP6-100]. Further to its D5 position [REP5-083a] NRW confirmed in [AS-012] [REP6-101] that it can conclude no AEoI alone or in-combination for all Welsh SPAs.

Having had regard to all submissions made, the ExA was content with the Applicant's collision risk modelling and therefore agrees with its assessment conclusions in respect of herring gull. The Secretary of State agrees.

4.4.5 Sites with great black-backed gull as qualifying features– PVA survival rates and collision risk and displacement in-combination effects

NE [REP1-053] identified that the Applicant had applied herring gull survival rates to the black-backed gull for PVA. It recommended using the herring gull 0-1 year survival rate and the adult great black-backed gull rate from Horswill and Robinson, as it is considered precautionary for weighted mean survival rates at 1% thresholds. NE also requested clarification on the parameters used to derive the mortality estimates recommending that they align with SNCB advice.

The Applicant provided updated PVA modelling for great black-backed gull using parameters recommended by NE at D5 [REP5-031].

Following review of the Applicant's D5 submissions, NE [REP6-100] agreed that the appropriate methodology had been used in the PVA assessment for the EIA population, but not the Isles of Scilly SPA population. Whilst it did not consider this specific issue fully resolved, NE agreed with the Applicant that there is not connectivity between the Isles of Scilly SPA population and the Project and therefore, agreed that an AEoI can be ruled out [REP6-100].

At Examination close, the RSPB [REP6-086] continued to disagree that an AEoI can be ruled out for the great black-backed gull as a feature of the Isles of Scilly SPA from collision and displacement mortality in-combination effects. Due to resource constraints, the RSPB was unable to review and conclude on the information provided by the Applicant at D5 [REP5-032] and [REP5-035]. In his consultation letter dated 18 July 2025, the Secretary of State invited comments from all IPs on information received in response to the previous consultation. No representation was received from the RSPB.

Having had regard to the submissions made, the ExA was satisfied with the assessment of survival rates and collision risk and displacement in-combination effects to great black-backed gull. The Secretary of State agrees.

4.4.6 Liverpool Bay SPA – red throated diver, common scoter, wintering waterbird assemblage

NE [RR-026], [REP1-053] and NRW [RR-027], [REP2-026] considered that Liverpool Bay SPA should also have been identified for inclusion in the Stage 1 and Stage 2 assessments, in view

of potential disturbance and displacement impacts from vessel movements in the construction or O&M phases on the red-throated diver and common scoter qualifying features. However, NE considered that adherence to specific measures secured through the Offshore EMP may mitigate these impacts.

The Applicant's Addendum [REP5-036] to the HRA Stage 2 SPA Report [APP-098], revised in [REP6-066] submitted at D5 presented Stage 1 and 2 assessments for the Liverpool Bay SPA. No AEoI was concluded for the red-throated diver, common scoter and waterbird assemblage qualifying features on the basis that mitigation measures would reduce potential effects and there would be a negligible increase in vessel traffic [REP5-036].

The Applicant also submitted an outline Offshore EMP at D4 [REP4-018]. Annex E of the Outline Offshore EMP cross-refers to the document 'Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels' [APP-070], revised in [REP5-046] and the Outline Vessel Traffic Management Plan [REP2-017], now [REP6-055] for the relevant measures to minimise disturbance to rafting birds from transiting vessels

NE [REP5-080] and NRW [REP5-083] initially considered the measures were inadequate and specified the measures they considered should be adopted by the Applicant [REP5-079], [REP5-080], [REP5-081], [REP5-083], which included:

- Selecting routes that avoid known aggregations of birds
- Maintaining direct transit routes (to minimise transit distances through areas used by divers) / restricting (to the extent possible) vessel movements to existing navigation routes (where the densities of divers are typically relatively low)
- Avoidance of over - revving of engines (to minimise noise disturbance)
- Where possible avoid works during the over winter period 1st Nov – 31st March inclusive
- Maintaining direct transit routes (to minimise transit distances through areas used by divers)
- Briefing of vessel crew on the purpose and implications of these vessel management practices (through, for example, tool-box talks)

At D6, NE reviewed the Applicant's document 'Measures to minimise disturbance to marine mammals and rafting birds from transiting vessels' [REP5-046] and confirmed [REP6-100] that appropriate mitigation had been secured and that it considered this matter resolved at D6. NE confirmed that an AEoI could be ruled out for the relevant qualifying features of the Liverpool Bay SPA alone and in-combination [REP6-105].

NRW [REP6-101] agreed that following the Applicant's D5 updates [REP5-047], an AEoI could be ruled out for red-throated diver, common scoter and the wintering waterbird assemblage features of the Liverpool Bay SPA on the basis that the mitigation measures are considered appropriate. JNCC is also in agreement with the conclusion of no AEoI on the red- throated diver and common scoter qualifying features of the Liverpool Bay SPA [REP3-035].

Submission of an Offshore EMP, which accords with the outline version, is secured through the draft DMLs (Condition 20) [REP7-007]. The outline Offshore EMP [REP4-018] is included within the list of documents to be certified under Schedule 5 of the draft DCO [REP7-007].

Inclusion of the measures to minimise disturbance to marine mammals and rafting birds from transiting vessels [REP5-046] in the Offshore EMP is secured through the draft DMLs (Condition

20) [REP7-007]. [REP5-046] is also included within the list of documents to be certified under Schedule 5 of the draft DCO [REP7-007].

Having regard to advice from the SNCBs, the ExA was satisfied that the mitigation measures proposed by the Applicant and secured through the recommended DCO would ensure the conservation objective target to 'minimise' disturbance caused by human activity to the red-throated diver and common scoter features of Liverpool Bay SPA would be achieved. The ExA was therefore content that the Project would not result in further deterioration of, or undermine the conservation objectives of, the Liverpool Bay SPA and that an AEoI, alone and in-combination, can be excluded. The ExA notes its conclusion that appropriate mitigation has been secured and that an AEoI can be excluded is shared by NE [REP6-105], NRW [REP6-101] and JNCC [REP3-035]. The Secretary of State agrees.

4.4.7 Grassholm SPA – gannet

The HRA Stage 2 SPA Report [APP-098], revised in [REP6-066] assessed impacts to the gannet feature of the Grassholm SPA, concluding no AEoI from the project alone, on the basis that the impact represented less than a 1% increase in baseline mortality of the SPA population. It also concluded no AEoI from the project in-combination as the predicted impact from the project alone represents less than a 0.05% increase in baseline mortality of the SPA population.

The Applicant submitted 'Ornithological assessment clarification data Welsh sites' [REP5-033, superseded by AS-013] in order to address NRWs methodological concerns. The Applicant subsequently submitted a clarification note [REP6-060] to provide further detail in relation to the information provided for gannet at the Grassholm SPA in [AS-013], as discussed with NRW, to set out both the SNCB and Applicant's positions.

In view of the above, NRW [AS-012], [REP6-101] confirmed agreement with the conclusion of no AEoI alone and in-combination to all Welsh SPAs, including gannet of Grassholm SPA. In response to the Secretary of State's consultation letter dated 19 June 2025, NRW[7] noted that the new conservation advice packages have resulted in the Grassholm SPA gannet conservation objectives being made more comprehensible. NRW note that the Morgan Applicant based their assessment on the decreased 2023 Grassholm gannet colony count (i.e. post HPAI) and that the Applicant undertook a PVA on the overly precautionary collision plus displacement in-combination total of 219 adult gannet mortalities (overly precautionary as it includes connectivity in the breeding season with the projects in the Liverpool Bay/NE Irish Sea when tracking data suggest there is not any, no consideration of macro avoidance, overly precautionary displacement rate of 10% for displacement impacts – see Section 2.7 of [AS-012] for details). This PVA suggested that the colony population could continue to grow from its current size (indicated by a growth rate of >1.00 – see 'Upper PVA summary' tab of [AS-013]), even with this overly precautionary impact. Therefore, NRW consider that its previous advice regarding Grassholm SPA gannet that an AEoI can be ruled out remains (as set out in Section 2.7 of [AS-012]).

Having had regard to the Examination submissions made, the ExA was satisfied that the Applicant has appropriately assessed impacts to the gannet feature of the Grassholm SPA. Having further considered post-Examination representations, the Secretary of State agrees.

4.4.8 Isle of Man Ramsar sites

The Applicant's Addendum [REP5-005] to the HRA Stage 2 SPA Report (then [APP-098], revised in [REP6-066]) provided at D5 presented an assessment of ornithological features of the Ballaugh Curragh Ramsar site and pRamsar sites located on the Isle of Man. The addendum identified one additional non-UK site and feature for inclusion in the Stage 2 assessment (the Southern Coasts and Calf of Man pRamsar site – guillemot qualifying feature) as a result of impacts from the Projectir in-combination with other plans and projects [REP5-005]. An assessment concluding no AEoI was presented in the same document. The Isle of Man Government (Territorial Sea Committee) confirmed in [REP4-039] and in its final SoCG with the Applicant (Tables 1.7, 1.10 and 1.11 [REP6-079]) that it agreed with the Applicant's conclusions.

4.4.9 Conclusion

The Applicant's assessment concluded that the Project would not adversely affect the integrity of any of the protected sites and features assessed, either alone or in-combination with other projects or plans. For several features, this conclusion relied upon the mitigation measures detailed in Table 1.6 of [APP-098], revised in [REP6-066].

Most offshore ornithological concerns were resolved during Examination through a high number of submissions. By the close of Examination, the Applicant had submitted updated assessments to take account of the guidance recommended by NE, NRW and JNCC. It also provided an explanatory note [REP6-057] and additional information [REP6-058], [REP6-059] to support the information submitted at D5 [REP5-032], [AS-013], [REP5-034], [REP5-035]. The Applicant's submitted additional details such as apportioning values for cumulative impacts, the process for identifying species requiring PVA and the associated PVA input logs. It also outlines the sources of information used and additional details needed to support the assessments. The final versions of the HRA Stage 1 Screening Report [REP6-067] and HRA Stage 2 SPA Report [REP6-066] used the Applicant's preferred approach. Irrespective of whether the Applicant's preferred approach or the SNCB-advised parameters are used, the Applicant concluded that AEoI from the Project and in-combination with other plans and projects could be ruled out beyond reasonable scientific doubt.

By the close of Examination, NE [REP6-091], JNCC [REP6-106] and NRW [REP6-101] had all confirmed agreement of no AEoI of any protected site for which they are responsible, as a result of the Project alone or in-combination with other plans or projects.

There is outstanding disagreement with RSPB on the baseline survey methods and assessment of Manx shearwater, the assessment of HPAI and in-combination displacement effects to great black-backed gull as a feature of the Isles of Scilly SPA.

The ExA considered the potential for the Project to result in adverse effects of all protected sites, offshore ornithology qualifying features and the impact pathways for which it considered there to be a LSE (as per Table 1.110 of the HRA Screening Report [APP-099], revised in [REP6-067] and Appendix A of [REP5-036]). The ExA was satisfied [ER C.4.135] that the correct impacts, sites and features have been assessed. The ExA was also satisfied, considering the additional information submitted during the Examination, that the scope of the Applicant's in-combination assessment is correct and no additional plans or projects need to be considered.

Having had regard to the outstanding concerns of RSPB in respect of HPAI, the ExA agrees with the Applicant's position [REP3-006] that it has considered the impact of HPAI in its application documents as far as possible. The ExA is content that the mitigation measures proposed by the Applicant and secured through the draft DCO mean that the Project would not result in further deterioration of, or undermine the conservation objectives of, the Liverpool Bay SPA and that an AEoI, alone and in-combination, can be excluded.

In terms of all other sites designated for offshore ornithology, the ExA is satisfied that the mitigation measures required to avoid AEoI are adequately detailed through the abovementioned management plans and secured in the draft DCO. The ExA notes that a number of the protected sites with offshore ornithological features for which it considers there to be a LSE are located within Scottish and Northern Irish waters. As noted previously, NatureScot and DAERA did not engage with the Examination. However, on the basis of the information submitted and considering the pathways assessed, the ExA is content that the Project would not result in further deterioration of, or undermine the conservation objectives of, any protected site with offshore ornithological qualifying feature(s) and that an AEoI from the project alone or in combination can be excluded.

In response to the Secretary of State's consultation letter dated 19 June 2025, NE stated it has reviewed all relevant D6 documents provided by the Applicant and has no further comments to add, confirming its final comments are captured in its D6a submissions [AS-014] [AS-015] [AS-016]. JNCC stated that whilst it remains of the view that AEoI can be excluded for all protected sites within its jurisdiction, this is on the basis of updated assessments provided in line with SNCB advice [REP5-034] [REP6-057]. However, the final HRA Stage 2 SPA Report [REP6-066] maintains that no PVAs have been carried on the basis of the Applicant's preferred approach, presenting a mismatch between the two documents. The Secretary of State acknowledges JNCC's concern and agrees that a final updated HRA incorporating additional and updated assessments during examination and SNCB advised approaches alongside the Applicants preferred approach would aid clarity and avoid confusion, both for the Secretary of State in reviewing the information to support the Appropriate Assessment and for easy access for future cumulative and in-combination assessments.

The Secretary of State is satisfied, having had regard to the Applicant's HRA Report, further information provided during Examination, mitigation measures secured in the DCO, the views of SNCBs and the recommendations of the ExA, that an AEoI of all protected sites designated for ornithology can be excluded beyond reasonable scientific doubt, both alone and in-combination with other plans and projects.

5 HRA conclusions

As the competent authority for energy NSIPs as defined under the Planning Act 2008, the Secretary of State has undertaken an AA under Regulation 63 of the Habitats Regulations and Regulation 28 of the Offshore Habitats Regulations. The Secretary of State has undertaken an AA in respect of the conservation objectives of protected sites to determine whether the Project, either alone or in-combination with other plans or projects, will result in an adverse effect on site integrity.

The Secretary of State has carefully considered all information available to him, including the HRA Report and associated updates, advice from the SNCBs, recommendations of the ExA and the views of all IPs.

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 which will be put in place to avoid or reduce potential adverse effects secured in the DCO and DML, there would be no implications for the achievement of site conservation objectives and therefore adverse effects on site integrity can be excluded for all protected sites and diadromous fish, marine mammal and ornithology features.

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