



Department for
Energy Security
& Net Zero

Habitats Regulations Assessment for an Application Under the Planning Act 2008

Peartree Hill Solar Farm

Regulation 63 of the Conservation of
Habitats and Species Regulations 2017

2 July 2026

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List of abbreviations

Term	Abbreviation
Adverse Effect on Integrity	AEoI
Appropriate Assessment	AA
Battery Energy Storage System	BESS
Department for Environment, Food & Rural Affairs	DEFRA
Development Consent Order	DCO
East Riding of Yorkshire Council	ERYC
Electromagnetic Fields	EMF
Environmental Statement	ES
European Economic Area	EEA
Examining Authority	ExA
Functionally Linked Land	FLL
Habitat Regulations Assessment	HRA
Horizontal Directional Drilling	HDD
Interested Parties	IPs
Likely Significant Effect	LSE
megawatts	MW
Nationally Significant Infrastructure Project	NSIP
National Site Network	NSN
Natural England	NE
nautical mile	nm
Outline Construction Environmental Management Plan	oCEMP
Outline Landscape and Ecological Management Plan	oLEMP
Requirement	R
Report on the Implications for European Sites	RIES
Solar Photovoltaic	PV
Special Areas of Conservation	SACs
Special Protection Areas	SPAs
Statement of Common Ground	SoCG
Statutory Nature Conservation Body	SNCB
Supplementary Advice on Conservation Objectives	SACO
The Planning Inspectorate	PINS

The Secretary of State for Energy Security and Net Zero	The Secretary of State
United Kingdom	UK

1 Introduction

1.1 Background

This is a record of the Habitats Regulations Assessment (“HRA”) that the Secretary of State for Energy Security and Net Zero (“the Secretary of State”) has undertaken under the Conservation of Habitats and Species Regulations 2017¹ (“the Habitats Regulations”) as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019² (“the 2019 Regulations”) in respect of the Development Consent Order (“DCO”) for Peartree Hill Solar Farm and its associated infrastructure (the “Project”), submitted by RWE Renewables UK Solar and Storage Limited (“the Applicant”). The Examining Authority (“ExA”) defines this as the “Proposed Development”. It is defined as the “Project” within this HRA for consistency with the terminology of the Habitats Regulations. For the purposes of these Regulations, the Secretary of State is the competent authority.

The Project comprises the construction, operation, maintenance and decommissioning of a solar photovoltaic (“PV”) electricity generating facility with an export capacity exceeding 50 megawatts (“MW”), a battery energy storage system (“BESS”) and other associated development. The solar PV electricity generating facility and BESS would be connected to the grid at Creyke Beck substation. The agreed grid connection for the Project will allow the export (to the national grid) of up to 320 MW of electricity at any time. The operational design life of the Project is 40 years.

The Project constitutes a nationally significant infrastructure project (“NSIP”) as defined by s. 14 of the Planning Act 2008³ as provided for under the transitional savings provisions in the Infrastructure Planning (Onshore Wind and Solar Generation) Order 2025 for solar projects with a capacity exceeding 50 MW.

The Project was accepted by the Planning Inspectorate (“PINS”) on 21 March 2025, and on 28 April 2025 two Inspectors were appointed as the ExA for the Application. The Examination of the Project Application began on 22 July 2025 and concluded on 6 January 2026. The ExA submitted its report of the Examination including its recommendation (“the ExA’s Report”) to the Secretary of State on 2 April 2026. Numbered references to the ExA’s Report are presented in the format “[ER *.*.]”.

This HRA also contains a consideration of the potential effects of the Project upon protected sites in European Economic Area (“EEA”) States (“transboundary sites”). This is described in more detail in Section 6 of this document.

¹ [The Conservation of Habitats and Species Regulations 2017](#)

² [The Conservation of Habitats and Species \(Amendment\) \(EU Exit\) Regulations 2019](#)

³ [Planning Act 2008](#)

1.2 Habitats Regulations Assessment

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

The Habitats Regulations provide for the designation of sites for the protection of habitats and species of international importance. These sites are called Special Areas of Conservation (“SACs”). The Regulations also provide for the classification of sites for the protection of rare and vulnerable birds and for regularly occurring migratory species within the UK and internationally. These sites are called Special Protection Areas (“SPAs”). SACs and SPAs together, referred to as European sites in legislation, form part of the UK’s National Site Network (“NSN”).

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

Candidate SACs, SACs and SPAs are afforded protection as protected sites. As a matter of policy⁴ the Government affords potential SPAs 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, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

This Project is not directly connected with, or necessary to, the management of a protected site [APP-145]. The Habitats Regulations require that, where the Project is likely to have a significant effect 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 the integrity (“AEoI”) of the site in view of that site’s conservation objectives. The following assessments are collectively referred to as an HRA:

Stage 1: Assessment of likely significant effects (“LSE”);

⁴ [NPS EN-1 para 5.4.5](#)

Stage 2: Appropriate Assessment to determine whether there is an AEoI of a protected site;

Stage 3: Assessment of Alternative Solutions;

Stage 4: Imperative Reasons of Overriding Public Interest; and

Stage 5: Compensatory measures.

Consent for the Project may be granted only after having ascertained that it will not adversely affect the integrity of protected sites, and no reasonable scientific doubt remains.

The Secretary of State has had regard to relevant guidance on the application of the HRA including the PINS (2025) Advice Note⁵, European Commission guidance⁶, as well as joint guidance by the Department for Environment, Food & Rural Affairs (“DEFRA”), Natural England (“NE”), the Welsh Government, and Natural Resources Wales (2021) on ‘Habitats Regulations Assessment: protecting a European site’⁷.

There are no parallel consents required for the Project which would require an additional HRA to be carried out by any other competent authority.

With regards to the ruling of the European Court of Justice in *People Over Wind, Peter Sweetman v Coillte Teoranta* (C-323/17) (the “Sweetman Judgement”), in reaching his conclusions regarding LSE, the Secretary of State took no account of measures intended to avoid or mitigate effects on any protected site.

1.3 Site conservation objectives

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

Guidance published by the Ministry of Housing, Communities and Local Government 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 objectives⁸. 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”*.

⁵ [Nationally Significant Infrastructure Projects: Advice on Habitats Regulations Assessments - GOV.UK](#)

⁶ [European Commission \(2019\) Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC:](#)

⁷ [Habitats Regulations Assessment: protecting a European site](#)

⁸ [Guidance on the use of Habitats Regulations Assessment: Appropriate Assessment](#)

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

Where supplementary advice is not yet available for a site, NE advises that HRAs should use the generic objectives⁹ 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 and, where available, supplementary advice on conservation objectives have been used by the Secretary of State to consider whether the Project has the potential to have an AEoI of sites, either alone or in-combination with other plans or projects. The SACOs relevant to this HRA, as published by NE and the Joint Nature Conservation Committee, are referenced in Table 1 of this document for protected sites considered as part of the AA for the Project.

⁹ [Conservation Objectives for European Sites in England](#)

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

Under Regulation 63(3) of the Habitats Regulations the competent authority must consult the appropriate Statutory Nature Conservation Body (“SNCB”) and have regard to any representation made by that body within such reasonable time as the authority specifies. NE is the SNCB for England and for English waters within the 12 nm limit.

The ExA, with the support of the Inspectorate’s Environmental Services Team, produced a Report on the Implications for European Sites (“the RIES”) [PD-018]. The purpose of the RIES was to compile, document, and signpost information submitted by the Applicant and Interested Parties (“IPs”) during the Examination (up to 31 October 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.

The RIES was published on the PINS NSIP website and the ExA notified IPs that it had been published. Consultation on the RIES was undertaken between 7 November 2025 and 28 November and comments were received from the Applicant [REP5-079].

1.5 Documents referred to in this HRA

This HRA has taken account of, and should be read in conjunction with, the documents produced as part of the Application and Examination, which are available on the PINS NSIP website¹⁰. In particular:

- the ExA’s Report;
- the RIES [PD-018];
- the Applicant’s assessment of effects, including:
 - the Applicant’s ‘Habitats Regulations Assessment - Information to inform Appropriate Assessment’ (“HRA Report”) [REP5A-004];
- the Environmental Statement (“ES”) [APP-036] – [APP-144];
- the final signed Statement of Common Ground (“SoCG”) with NE [REP5-087], which confirmed there were no outstanding HRA matters; and
- all other information submitted during the Examination and during the Secretary of State’s consideration of the Application.

¹⁰ [Documents | Peartree Hill Solar Farm](#)

2 Project description

A detailed description of the Project is presented in Chapter 3 of the ES [APP-043].

The Project comprises the construction, operation, maintenance and decommissioning of a solar PV electricity generating facility with an export capacity exceeding 50MW, BESS, and other associated development. The solar PV electricity generating facility and BESS would be connected to the grid at Creyke Beck substation.

The key components of the Project comprise:

- PV modules and associated mounting structures (groups of which are referred to as 'arrays' and would be located on five broad areas of land identified as Land Areas B-F);
- On-site supporting equipment including inverters, transformers, direct current - direct current converters and switchgear;
- BESS including batteries and associated enclosures, monitoring systems, air conditioning, electrical cables and fire safety infrastructure;
- Two substations, including transformers, switchgear, circuit breakers, control equipment buildings, control functions, material storage, parking, as well as wider monitoring and maintenance equipment;
- Low voltage and interconnecting cabling within and between the Land Areas to connect the solar PV modules together and to transmit electricity from the solar PV modules and BESS to one of the two on-site substations;
- Underground cables connecting the on-site substations to the National Grid Creyke Beck substation;
- Works at the National Grid Creyke Beck substation to facilitate the connection of the underground cabling into the substation;
- Associated infrastructure including access tracks, parking, security measures, gates and fencing, lighting, drainage infrastructure, storage containers, earthworks, surface water management, maintenance and welfare facilities, security cabins and any other works identified as necessary to enable the development;
- Highway works to facilitate access for construction vehicles;
- New permissive paths connecting to the existing public right of way network;
- Environmental mitigation and enhancement measures, including landscaping, habitat management, biodiversity enhancement and amenity improvements; and
- Temporary development during the construction phase including construction compounds, parking and laydown areas.

2.1 Project Location

The Project lies wholly within England and is wholly within the administrative area of East Riding of Yorkshire Council ("ERYC"). The location of the Project is shown in the Location and Land Area Plan [REP2-049] and is described in detail in ES Chapter 2 [REP5-010].

The Project site is made up of 5 parcels of land:

- Land Area B: Land north-west of Long Riston;
- Land Area C: Land west of Arnold;
- Land Area D: Land south of the A1035;
- Land Area E: Land east of Weel; and
- Land Area F: Land north of Wawne.

There is no Land Area A – this Land Area was removed as part of the Applicant's iterative design process.

These are shown in Figure 1 below. The 'Order Limits' are outlined in red in Figure 1.

The Order land for the Project is located north of the city of Hull and east of the town of Beverley, between the villages of Tickton, Routh, Leven, Long Riston, Arnold, Wawne, Woodmansey and Weel.

The 'Site' comprises approximately 893 hectares of land, predominantly consisting of agricultural fields (mostly arable) interspersed with trees, hedgerows and woodland, drainage ditches and dykes, sections of public footpaths, sections of public highway, farm access tracks, an area of common land (known as Figham Common) and a section of the River Hull.



2.2 Changes to the Application during Examination

Three formal change requests were made by the Applicant throughout Examination, containing 13 proposed changes/corrections [PDA-001] [REP2-149] [REP4-077].

Change Request 3 [REP4-077] related to the HRA mitigation package and addressed IP concerns regarding permissive paths which encircled the mitigation areas. Other changes sought to address points raised by IPs and the ExA, and to update or provide additional information resulting from changes and discussions that had occurred during the Examination.

The ExA confirmed that none of the proposed changes were so material that they constituted a materially different project, and the changes were not considered, individually or cumulatively, to lead to the Project being different in nature or substance to that which was originally applied for. Nor did the ExA consider they would they be likely to result in any materially new or materially different environmental effects [ER.1.5.5] [ER.1.5.8] [ER.1.5.11].

No further questions on HRA matters were asked in the determination stage.

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

Under regulation 63 of the 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.

3.1 Protected Sites

The protected sites and qualifying features that were considered in the Applicant’s assessment of LSE are presented in Table 4.1 of the HRA Report [REP5A-004].

In summary, the Applicant identified the following protected sites that lie within 10km of the Project which were included within the screening assessment:

- Hornsea Mere SPA 5815m east;
- Humber Estuary SPA 8500m south;
- Humber Estuary Ramsar site 8500m south;
- Humber Estuary SAC 8500m south; and
- Greater Wash SPA 9560m east.

The spatial relationship between the Order Limits of the Project and the protected sites is shown in Figure 2 below:

Peartree Hill Solar Farm Habitats Regulations Assessment

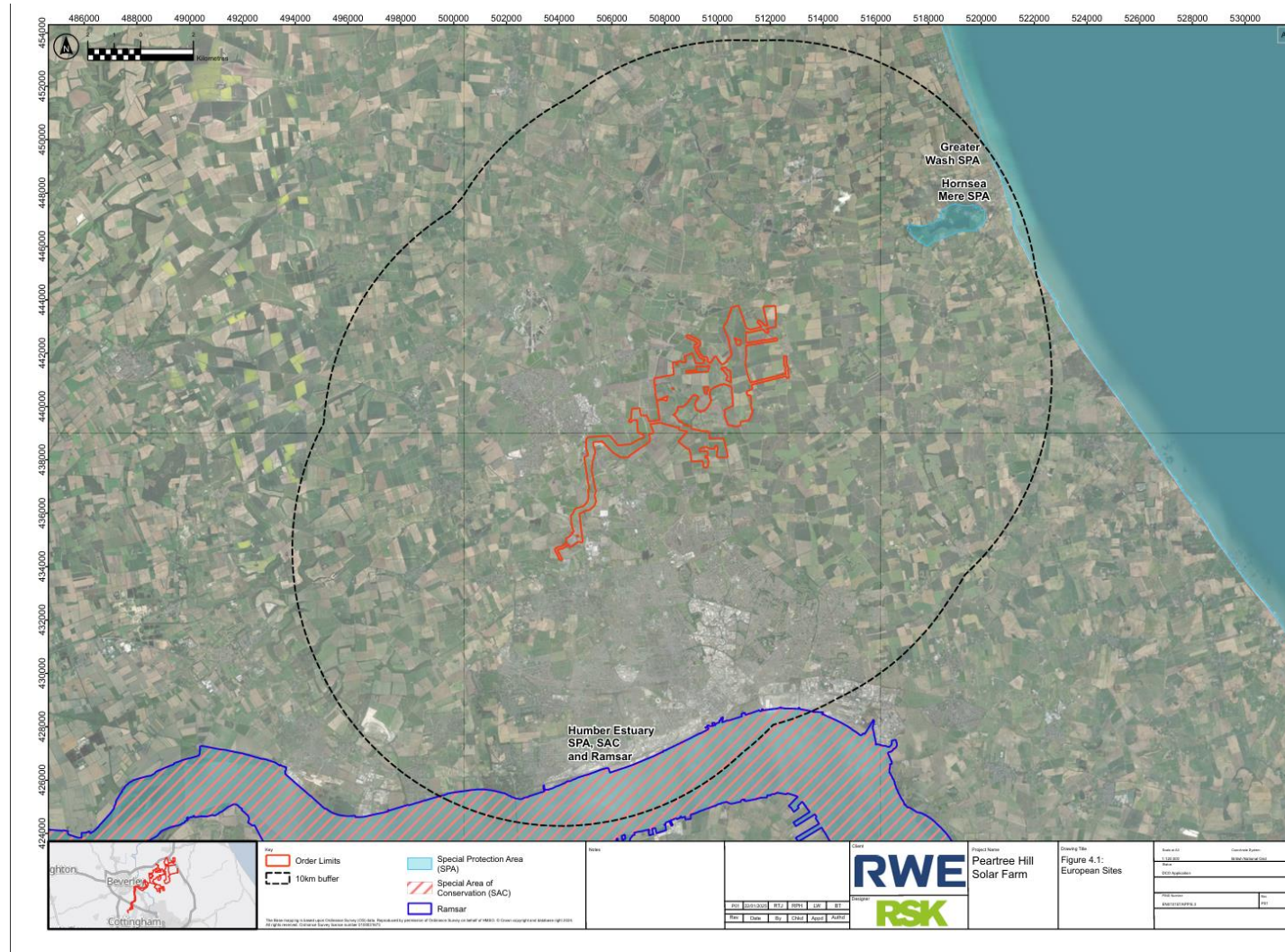


Figure 2: Figure showing the spatial relationship between the Project's Order Limits and protected sites, taken from [REP5A-004]

Section 4.3 of the HRA Report [REP5A-004] presents the broad approach undertaken by the Applicant for LSE screening and the process to identify relevant protected sites and qualifying features.

The Applicant concluded that the Project would not be likely to give rise to significant effects, either alone or in combination with other projects or plans, on all qualifying features of the Greater Wash SPA. NE confirmed agreement with the Applicant's conclusion of no LSEs in respect of the Greater Wash SPA [REP1-093].

The final HRA Report [REP5A-004] (Section 4.6) identifies the potential impact pathways for the qualifying habitats and/or species.

The following potential effects were considered in the screening assessment:

- Loss of Functionally Linked Land ("FLL") for qualifying bird species;
- Disturbance/displacement of qualifying bird species using FLL;
- Disruption of flight paths of qualifying bird species as a result of glint and glare;
- Habitat degradation as a result of changes in air quality;
- Vibration/ noise disturbance of river lamprey;
- Disturbance of river lamprey as a result of Electromagnetic Fields ("EMF"); and
- Habitat degradation as a result of changes in water quality/hydrology during the construction/decommissioning phase.

NE confirmed in [REP1-093] that it agreed with the LSE conclusions in the HRA Report [APP-145] regarding the impact pathways and sites screened into the assessment, with the exception of a concern regarding the absence of including the Humber Estuary SAC, Humber Estuary SPA and Humber Estuary Ramsar site for water quality impacts during construction and operation. NE [RR-012] requested that the Applicant included an assessment of the potential impacts of cleaning the solar PV modules, and the fire suppression protocol during operation. The Applicant updated their HRA Report [REP5A-004] to include more detail on this potential impact pathway and ruled out an LSE. Following the Applicant's update, NE [REP2-154] agreed with the conclusions of the Applicants HRA Report screening.

Based on the information before him, the views of IPs as well as the recommendations of the ExA, the Secretary of State is content to adopt the rationale of the Applicant, NE, and the ExA that the correct protected sites and qualifying features have been identified.

3.2 Likely Significant Effects alone

The Applicant identified the effects considered to have the potential to result in LSEs from the Project alone, in Section 4 of the HRA Report [REP5A-004].

The Applicant concluded that the following impacts had the potential to result in LSE:

- Loss of FLL for qualifying bird species;
- Disturbance/displacement of qualifying bird species using FLL during the construction phase;
- Disruption of flight paths of qualifying bird species as a result of glint and glare;
- Vibration/noise disturbance of river lamprey;
- Disturbance of river lamprey from EMF; and
- Habitat degradation as a result of changes in water quality/hydrology during the construction/decommissioning phase.

The HRA Report concluded no potential LSE from the proposed development alone on all qualifying features of the five sites considered in the screening assessment for the following impact pathways:

- habitat degradation as a result of changes in air quality;
- degradation of habitats as a result of changes in water quality/hydrology during the operational (including maintenance) phase; and
- disturbance/displacement of qualifying bird species using FLL during the operational (including maintenance) phase.

Section 4.8 of the HRA Report provides the screening conclusions provided by the Applicant. The potential for LSE alone was identified for the following four protected sites:

- Hornsea Mere SPA;
- Humber Estuary SPA;
- Humber Estuary SAC; and
- Humber Estuary Ramsar.

At the end of Examination, no further concerns were raised by the ExA or IPs in relation to the Applicant's conclusions of LSE alone during construction, operation and decommissioning. On this matter, the Secretary of State is in agreement with NE [REP1-093][REP2-154] and the ExA [ER.1.2.21].

3.3 Likely Significant Effects in-combination

The potential for LSE in-combination with other projects was identified for the following four protected sites (as per Project alone):

- Hornsea Mere SPA;
- Humber Estuary SAC;
- Humber Estuary SPA; and
- Humber Estuary Ramsar.

Where the Applicant's screening exercise established the potential for LSE to arise from the proposed development alone, the potential for in-combination effects was also considered and discussed in the HRA Report. Plans and projects within 10km of the Project were reviewed by

the Applicant based on the potential impact pathways already identified. These are detailed in Table 8-1 and Section 8.1 of the HRA Report. No party raised issue with this methodology during Examination.

At the end of Examination, the ExA was satisfied with the approach taken by the Applicant and agreed with the Applicant's conclusion [ER 1.2.22]. In their final SoCG NE [REP5-087] confirmed all matters were resolved. On this matter, the Secretary of State is in agreement with NE and the ExA.

3.4 Likely Significant Effects conclusion

The Secretary of State has carefully considered the potential effects of the Project on all qualifying features of the protected sites identified, and raised during the Examination, taking into account their conservation objectives, to determine whether there will be LSEs in the context of the Habitats Regulations. The Secretary of State considers that sufficient information has been provided to inform an assessment in line with his duties under the Habitats Regulations.

Based on the information before him, the views of IPs and NE, as well as the recommendations of the ExA, the Secretary of State concludes that LSE from the Project, alone and in-combination with other plans or projects, cannot be ruled out for the following sites:

- Hornsea Mere SPA;
- Humber Estuary SAC;
- Humber Estuary SPA; and
- Humber Estuary Ramsar.

An AA of the impacts of the Project on those protected sites is therefore required. Table 1 in Annex A of this document sets out the full list of qualifying features and impact pathways of those protected sites that the Secretary of State taken forward to AA to consider whether the Project would result in an AEol.

4 Appropriate Assessment Methodology

The requirement to undertake an AA is triggered when a competent authority, in this case the Secretary of State, determines that significant effects on a protected site either alone or in-combination with other plans or projects cannot be ruled out for a plan or project. Guidance issued by DEFRA¹¹ states that the purpose of an AA is to assess the implications of the plan or project in respect of the site's conservation objectives, either individually or in-combination with other plans and projects, and that the conclusions should enable the competent authority to ascertain whether the plan or project will adversely affect the integrity of the site concerned. The focus is therefore specifically on the species and/or habitats for which the protected site is designated.

In line with the requirements of Regulation 63 of the Habitats Regulations:

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

The purpose of this AA is to determine whether an AEoI on the features of the protected sites identified in Table 1 of this HRA, as a result of the Project alone or in-combination with other plans or projects, can be excluded in view of the site's conservation objectives and using the best scientific evidence available.

In accordance with the precautionary principle embedded in the integrity test and established through case law, the Secretary of State may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the protected site, and this must be demonstrated beyond all reasonable scientific doubt. If the Secretary of State cannot exclude AEoI of the affected protected sites beyond all reasonable scientific doubt, then he can only agree to a plan or project if it complies with the requirements of Regulation 64 of the Habitats Regulations. Regulation 64 provides that the Secretary of State may agree to the plan or project only if satisfied that there are no alternative solutions, that the plan or project must be carried out for imperative reasons of overriding public interest and compensatory measures are secured to ensure that the overall coherence of the network of European sites is maintained.

¹¹ [Defra HRA Guidance](#)

5 Stage 2: Appropriate Assessment

The Secretary of State has undertaken an objective scientific assessment of the implications of the Project on the qualifying features of the protected sites identified in his screening assessment, using the best scientific evidence available. The assessment has been made in light of the site's conservation objectives.

Table HRA2 on pages (C:XIV)-(C:XVII) in Appendix C of the ExA's Report lists the sites and features which the Applicant [REP5A-004] concluded no AEol from the Project, alone or in-combination, and which no IPs raised concerns. This includes all features of the Hornsea Mere SPA - neither NE nor other IPs raised concerns in relation to the Applicant's conclusions for this site [REP1-093][REP5-087].

The Secretary of State agrees with the conclusions of the Applicant, NE, IPs, and the ExA for the features and sites listed in Table HRA2. The assessment of the remaining sites and features is set out below.

5.1 Loss of functionally linked land during construction and operation for qualifying bird species – Humber Estuary SPA and Ramsar

In Section 7.2 of the HRA Report [REP5A-004], the Applicant assessed the potential for an AEol of the Humber Estuary SAC and Ramsar from the Project alone and in-combination with other plans and projects as a result of loss of FLL during construction and operation. The Applicant considers there would be temporary loss of agricultural land, which is suitable for foraging and roosting birds associated with the protected sites, during the 24-month construction period and for the lifetime of the Project (40 years).

The loss of FLL could reduce feeding opportunities and/or lead to changes in species distribution with potential consequential effects on survival rates, which could make it more difficult to meet the conservation objectives of the protected sites. The supplementary advice for the Humber Estuary includes a target to 'restore the extent, distribution and availability of suitable habitat (either within or outside the site boundary) which supports the feature for all necessary stages of the non-breeding/wintering period (moulting, roosting, loafing, feeding) to an unknown extent, based on restoring natural estuarine functioning', and the loss of FLL would make this target more difficult to achieve.

The Applicant considers that adverse effects, from the loss of FLL, on golden plover (*Pluvialis apricaria*), lapwing (*Vanellus vanellus*), mallard (*Anas platyrhynchos*), teal (*Anas crecca*) and black-headed gull (*Chroicocephalus ridibundus*) could not be ruled out. Mitigation is therefore required.

The mitigation proposed by the Applicant in their outline Landscape and Ecological Management Plan ("oLEMP") [REP6-025] includes the creation of a series of shallow and wide scrapes in flat

arable fields (mitigation areas 11 and 13) and grassland creation within mitigation area 9 prior to construction, which would provide resting and feeding opportunities for the impacted species.

NE [RR-012] raised concerns that the mitigation may not be sufficient, and that additional assessment of the habitat's suitability and capacity is needed beyond the 'bird days' calculations provided by the Applicant. NE also responded to the Applicant's position in [APP-148] in which they said that 'a 150m buffer around core mitigation areas would not be workable'. NE reiterated their previous advice that recommended a 150m buffer around core mitigation areas, within which the land use is secured for a purpose which will not affect the integrity of the mitigation area. If this was not included, NE requested additional assessment of the habitat closer to panels where bird usage would be reduced, as well as the adequacy of the core habitat. It advised that mitigation areas must be large and ecologically suitable, especially for species like golden plover and lapwing which require open vistas and larger fields.

The Applicant updated its oLEMP ([REP1-056] and [REP3-032]) to address NE's concerns. Following these updates, NE [REP4-084] confirmed that it considered these issues now resolved.

NE raised a further issue in relation to the mitigation area proposed. In [RR-012] NE noted that the Applicant's indicative masterplan [APP-058] showed the proposed mitigation area was surrounded by permissive walking routes and advised that the presence of human disturbance around the mitigation areas may reduce its suitability, pointing to evidence from NatureScot¹² which shows golden plover typically require a buffer distance of between 200m-500m from pedestrians. NE and ERYC [REP1-086] also requested clarification as to whether the paths would be fenced off, as the area could be made completely unsuitable if dogs were able to go into the mitigation areas.

In response the Applicant made a proposed change to the DCO [AS-017]/[REP4-077], which aimed to address the concerns. Amendments made include reducing the permissive path network by 800m (there would still be approximately 11.8km retained) and introducing 6km of additional post and wire fencing between the paths and ecological mitigation areas, up to 1m in height.

Following these updates, NE [REP5-087] and ERYC [REP6-037] confirmed that their concerns had been resolved.

The final issue raised surrounding the ecological mitigation area was raised by both NE [RR-012] and ERYC [REP1-086] in relation to its hydrological viability. Both shared concerns that there was insufficient information to conclude that the proposed scrapes could hold sufficient water to provide the proposed wet scrapes, as the Applicant had not yet carried out any hydrological studies of the existing drainage regime. NE advised that if hydrological studies were not completed at that stage, the HRA should include a detailed assessment of the potential alternative approaches to mitigation.

In response, the Applicant made numerous updates to the oLEMP, including changing the proposal from 'wet grassland with scrapes' to 'flower rich neutral grassland with scrapes', in line with advice provided by ERYC [REP1-056]. These scrapes would be fed by rainfall and winter

¹² [Disturbance Distances in selected Scottish Bird Species – NatureScot Guidance](#)

flooding, and will remain wetter for longer than the surrounding grassland and dry gradually during spring and early summer. Finally, the oLEMP [REP3-032] was updated to include a commitment to monitor and maintain the habitat for the duration of the construction and operation of the Project.

NE [REP4-084] stated that this issue was now resolved based on the additional information provided, and the commitment to implement appropriate measures to 'ensure the bird scrapes hold water during the winter and accomplish their purpose', with the scrapes monitored and maintained to ensure suitable wetland habitats. ERYC [REP3-043] confirmed their concerns were resolved following the change from 'wet grassland' to 'flower rich neutral grassland'.

On the basis of the updated mitigation measures and evidence, the Secretary of State concludes, in agreement with ExA [ER.1.4.37][ER.1.4.43][ER.1.4.67] NE and ERYC that this mitigation is sufficient to ensure the loss of FLL would not result in an AEol of the Humber Estuary SPA or Ramsar, either alone or in combination with other plans or projects.

5.2 Disturbance of qualifying bird species using Functionally Linked Land during construction and decommissioning – Humber Estuary SPA and Ramsar

In Section 7.3 of the HRA Report [REP5A-004], the Applicant assessed the potential for an AEol of the Humber Estuary SPA/Ramsar from the Project alone and in-combination with other plans and projects as a result of disturbance/displacement during construction, operation and decommissioning.

The Applicant identified that the potentially disturbing activities include the movements of lorries, tracked excavators, and bulldozers associated with earthworks and deliveries. Additionally in its HRA Report [REP5A-004] the Applicant noted that it will use a push press piling rig to install the majority of piles for the solar PV modules, and whilst the noises from this are likely to be lower than from other piling construction methods, the Applicant acknowledged that it still has the potential to disturb/displace birds due to the irregular, unpredictable nature of the sounds generated. Disturbance could reduce feeding efficiency and/or lead to changes in species distribution and therefore contradict the conservation objectives of the SPA/Ramsar sites.

The Applicant outlined its proposed mitigation in section 7.3.15 of its HRA Report. The primary mitigation for the affected species is the creation of habitats suitable for golden plover, lapwing, mallard, teal, and black-headed gull, which would be established prior to the start of construction and would be available for use by birds which may be displaced. This is secured through the oLEMP (Requirement ("R") 9 of the DCO). This is the same mitigation described in section 5.1 of this HRA, which is proposed to mitigate the impacts of the loss of FLL habitat.

Further construction specific mitigation is secured via the Outline Construction Environmental Management Plan ("oCEMP") (R4 of the DCO). This includes but is not limited to: visual and acoustic barriers that are to be installed between bird mitigation areas and the working areas, the provision of lined and sealed acoustic covers for noisy equipment, and adherence to good practice guidelines.

Based on the information before him, and in agreement with the ExA [ER.1.4.61][ER.1.4.64][ER.1.4.70] and NE [REP5-087], the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects, will not adversely affect the integrity of the qualifying bird features of the Humber Estuary SPA and Ramsar from disturbance/displacement.

5.3 Vibration/noise disturbance of river lamprey during construction – Humber Estuary SAC and Ramsar

In Section 7.4 of the HRA Report [REP5A-004], the Applicant assessed the potential for an AEol to the river lamprey qualifying feature of the Humber Estuary SAC and Ramsar from the Project alone and in-combination with other plans and projects as a result of vibration and noise during construction.

The River Hull is considered FLL for river lamprey associated with the Humber Estuary SAC and Ramsar site. Habitat assessment surveys carried out by the Applicant did not identify any suitable lamprey spawning habitat in the section of the River Hull to be crossed by Horizontal Directional Drilling (“HDD”), but noted the possibility for disturbance to mature river lamprey migrating to upstream spawning habitats.

The Applicant’s original HRA Report assessed that as the preferred timings to undertake HDD (April-September) avoid the peak lamprey migration period (winter to early spring), no adverse impacts were anticipated.

NE [RR-012], the EA [RR-005], and ERYC [REP1-086] requested that the oCEMP secured the works to be carried out between April and September, however the Applicant stated that it could not commit to those timings, but would adhere to them wherever possible.

The Applicant also updated its HRA report to note that in the unlikely event that HDD would be carried out outside April-September, the works under the River Hull itself would be very short term (a maximum of 24 hours) temporary, and small in scale. The Applicant therefore concluded that no adverse effects were anticipated, even if works were to be carried out during the migration period.

Following these updates, NE [REP2-154], the EA [REP2-153] and ERYC [REP3-043] confirmed the matter was now resolved. The ExA were also satisfied that this LSE pathway would not result in an AEol, alone or in-combination with other plans or projects [ER.1.4.76;79].

Based on the information before him, and in agreement with NE, the EA, ERYC and the ExA, the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects, will not adversely affect the integrity of the qualifying features of the Humber Estuary SAC and Ramsar site in regards to disturbance of river lamprey from vibration and noise.

5.4 Disturbance of river lamprey from EMF during operation – Humber Estuary SAC/Ramsar

Once operational, the buried cable will produce EMF. The intensity of this EMF will reduce with distance from the source.

In its HRA Report [REP5A-004], the Applicant sets out that the Project design includes measures that will minimise the strength of the EMF within the River Hull. This includes burying the cable at least 7m below the riverbed level, using Alternating Current rather than Direct Current, installing cables with an insulating layer (e.g. Cross-Linked Polyethylene), and bundling cables within ducting, which reduces EMF vectors.

With this mitigation in place, NE [REP2-154], the EA [REP2-153] and the ExA [ER.1.4.85][ER.1.4.88][ER.1.4.106] agreed with the Applicant's conclusion that an AEoI could be excluded.

Based on the information before him, and in agreement with NE, the EA, and the ExA, the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects, will not adversely affect the integrity of the qualifying features of the Humber Estuary SAC and Ramsar site in regards to disturbance of river lamprey from EMF.

5.5 Degradation of habitats for river lamprey as a result of changes in water quality during construction and decommissioning – Humber Estuary SAC and Ramsar

The Applicant considered potential for degradation of habitats within the River Hull and its associated drainage ditch system, which have been identified as FLL for river lamprey. The Applicant identified that during construction there is potential for the release of breakout contaminants, particularly bentonite during HDD, which could lead to contamination of the River Hull. In their oCEMP, the Applicant secured a specific HDD methodology to manage the risk of bentonite breakout.

With this commitment, the Applicant concluded that there would be no AEoI on river lamprey from the degradation of habitats as a result of changes in water quality/hydrology during construction and decommissioning.

NE [RR-012] raised concerns about the potential contamination, advising that the oCEMP needed to provide sufficient site-specific detail on the bentonite breakout mitigation measures.

The Applicant confirmed that the fine details would be included in the final CEMP, but could not be finalised until a contractor had been appointed post-consent, and methodologies had been agreed upon.

NE [REP2-154] advised that the Applicant should provide further details on the contents of the CEMP, to which the Applicant stated that further details were not yet available, but the final CEMP would be in line with the oCEMP and NE would also now be consulted on the procedures prior to construction commencing.

Following the addition of NE as a statutory consultee on the bentonite breakout procedures in the final CEMP, NE [REP3-005] confirmed that this matter was resolved.

The ExA were satisfied that this impact pathway would not result in an AEoI, alone or in-combination with other plans or projects [ER.1.4.97][ER.1.4.100][ER.1.4.109].

With the inclusion of NE as a consultee on the final CEMP, as secured by R4 of the DCO, the Secretary of State concludes, in agreement with NE and the ExA, that the Project, either alone or in-combination with other plans or projects, will not adversely affect the integrity of the qualifying features of the Humber Estuary SAC and Ramsar sites in regards to the degradation of the river lamprey habitat as a result of the change in water quality during construction and decommissioning.

5.6 Appropriate Assessment conclusion

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

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

Based on the available information before him, and subject to the mitigation measures as secured in the final Order, the Secretary of State is satisfied that the Project, either alone or in-combination with other plans or projects, will not adversely affect the qualifying features of the Hornsea Mere SPA or the Humber Estuary SPA/SAC/Ramsar sites. The Secretary of State is satisfied that further tests set out in the Habitats Regulations are therefore not required.

6 Transboundary assessment

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

On 20 December 2023, following the Applicant's request for an EIA scoping opinion, PINS provided a transboundary screening opinion [APP-098]. No significant effects were identified on the environment in an EEA member state.

A second screening was undertaken by PINS on 29 May 2025 [OD-005]. Again, no EEA member states were identified as being likely to have significant effects on their environment in terms of extent, magnitude, probability, duration, frequency or reversibility.

The Applicant did not identify any LSE on non-UK European sites in EEA states in its HRA report [REP5A-004] or within its ES. NE confirmed that the correct sites had been considered by the Applicant [REP1-093].

No impacts to protected sites outside of the UK were raised for discussion by any IPs during the Examination, including following publication of the Inspectorate's transboundary screening.

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

7 Conclusion

The Applicant provided multiple updates of the HRA Report [APP-145; REP1-015; REP2-071; REP3-014; REP5A-004] to address the matters raised during Examination.

At the end of Examination, NE confirmed in their final SoCG that there were no outstanding disagreements on the conclusions of the final HRA Report [REP5-087].

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

The Secretary of State concludes that LSEs cannot be excluded at four protected sites, when the Project is considered alone or in-combination with other plans or projects. These LSEs were taken forward to an AA to consider whether the Project would result in an AEoI of the protected sites.

Having considered the information available to him and having made a full assessment of the potential for an AEoI of each of the protected sites for which the potential for LSE was identified, taking into account the views of the Applicant, NE, all IPs, as well as the ExA, the Secretary of State concludes that an AEoI can be excluded beyond reasonable scientific doubt, subject to the measures secured through the final Order.

As such, the Secretary of State is satisfied that there is no significant risk to any protected site and their qualifying features as a result of the Project and considers that no further tests set out in the Habitats Regulations are required.

ANNEX A

Table 1: Protected sites for which an LSE was concluded alone, or in-combination

Protected site	Qualifying feature(s)	Conservation Objectives and SACOs	Potential for Likely Significant Effects
Humber Estuary SPA	Avocet (wintering non-breeding) Bar-tailed godwit (wintering) Bittern (wintering and breeding) Black-headed gull Black-tailed godwit (wintering and passage) Brent goose (non-breeding) Crane (non-breeding) Curlew (non-breeding) Dunlin (wintering and passage) Golden plover (wintering, non-breeding) Goldeneye (non-breeding) Green sandpiper (non-breeding)	Conservation objectives, see footnote ¹³ SACO, see Footnote ¹⁴	Loss of FLL for qualifying bird species Disturbance/ displacement of qualifying bird species using FLL Degradation of habitats as a result of changes in water quality/hydrology Disruption of flight paths of qualifying bird species as a result of glint and glare

¹³ [Humber Estuary SPA Conservation Advice](#)

¹⁴ [Humber Estuary SPA Supplementary Advice on Conservation Objectives](#)

	Greenshank (non-breeding) Grey plover (non-breeding) Greylag goose (non-breeding) Hen harrier (wintering) Knot (wintering and passage, non-breeding) Lapwing (non-breeding) Little egret (non-breeding) Little tern (breeding) Mallard (non-breeding) Marsh harrier (breeding) Oystercatcher (non-breeding) Pink-footed goose (non-breeding) Pochard (non-breeding) Redshank (wintering and passage, non-breeding) Ringed plover (non-breeding) Ruff (non-breeding) Sanderling (non-breeding) Scaup (non-breeding) Shelduck (wintering and non-breeding) Shoveler (non-breeding)		
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	Teal (non-breeding) Turnstone (non-breeding) Whimbrel (non-breeding) Wigeon (non-breeding) Wintering bird assemblage		
Humber Estuary Ramsar	Non-breeding waterbird assemblage Golden plover (passage and wintering) Knot (passage and wintering) Dunlin (passage and wintering) Black-tailed godwit (passage and wintering) Redshank (passage and wintering) Shelduck (wintering) Bar-tailed godwit (wintering)	N/A	Loss of FLL for qualifying bird species Disturbance/displacement of qualifying bird species using FLL Degradation of habitats as a result of changes in water quality/hydrology Disruption of flight paths of qualifying bird species as a result of glint and glare
	River Lamprey	N/A	Degradation of habitats as a result of changes in water quality/hydrology Vibration/noise disturbance of river lamprey Disturbance of river lamprey as a result of EMF

Peartree Hill Solar Farm Habitats Regulations Assessment

Humber Estuary SAC	River Lamprey	Conservation objectives, see footnote ¹⁵ SACO, see Footnote ¹⁶	Degradation of habitats as a result of changes in water quality/hydrology Vibration/noise disturbance of river lamprey Disturbance of river lamprey as a result of EMF
Hornsea Mere SPA	Gadwall Goldeneye Pochard Shoveler Tufted duck Mute Swan	Conservation objectives, see footnote ¹⁷ SACO, see footnote ¹⁸	Loss of FLL for qualifying bird species Disturbance/ displacement of qualifying bird species using FLL Degradation of habitats as a result of changes in water quality/hydrology Disruption of flight paths of qualifying bird species as a result of glint and glare

¹⁵ [Humber Estuary SAC Conservation Advice](#)

¹⁶ [Humber Estuary SAC Supplementary Advice on Conservation Objectives](#)

¹⁷ [Hornsea Mere SPA Conservation Advice](#)

¹⁸ [Hornsea Mere SPA Supplementary Advice on Conservation Objectives](#)

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

Date: 2 July 2026