

The Planning Inspectorate Yr Arolygiaeth Gynllunio

REPORT on the IMPLICATIONS for EUROPEAN SITES (RIES)

Proposed Little Crow Solar Park

An Examining Authority report prepared with the support of the Environmental Services Team (EST)

Planning Inspectorate Reference: EN010101

01 September 2021

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1 INTRODUCTION

1.1 Background

- 1.1.1 INRG Solar (Little Crow) Ltd ('the Applicant') has applied to the Secretary of State (SoS) for a development consent order (DCO) under section 37 of the Planning Act 2008 (PA2008) for the proposed Little Crow Solar park ('the Proposed Development'). The SoS has appointed an Examining Authority (ExA) to conduct an examination of the Proposed Development, to report its findings and conclusions, and to make a recommendation to the SoS as to the decision to be made on the DCO application.
- 1.1.2 The relevant SoS is the competent authority for the purposes of the Habitats Directive¹ and the Habitats Regulations² for DCO applications submitted under the PA2008 regime. The findings and conclusions on nature conservation issues reported by the ExA will assist the SoS in performing their duties under the Habitats Regulations.
- 1.1.3 This Report on the Implications for European Sites (RIES) compiles, documents and signposts information provided within the DCO application, and the information submitted during Examination by the Applicant and Interested Parties (IPs), up to Deadline 6 of the Examination (31 August 2021) in relation to the potential effects of the Proposed Development on European Sites³. The RIES is not a standalone report and should be read in conjunction with the relevant examination documents. Where document references are presented in square brackets [] in the text of this RIES, that reference can be found in the Examination Library published on the National Infrastructure Planning website, which can be accessed using the following link:

http://infrastructure.planninginspectorate.gov.uk/document/EN010101-000729

- 1.1.4 This RIES is issued to ensure that IPs including Natural England (NE) as the Statutory Nature Conservation Body (SNCB), are consulted formally on Habitats Regulations matters. This process may be relied on by the SoS for the purposes of Regulation 63(3) of the Habitats Regulations. Following consultation, the responses will be considered by the ExA in making its recommendation to the SoS and made available to the SoS along with this report. This RIES will not be revised following consultation.
- 1.1.5 The Applicant in submitting its application has identified no likely significant effects (LSE) on European sites and qualifying features in

¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (as codified) (the 'Habitats Directive').

² The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).

³ The term European Sites in this context includes Sites of Community Importance (SCIs), Special Areas of Conservation (SACs) and candidate SACs, Special Protection Areas (SPAs), possible SACs, potential SPAs, Ramsar sites, proposed Ramsar sites, and any sites identified as compensatory measures for adverse effects on any of the above. For a full description of the designations to which the Habitats Regulations apply, and/ or are applied as a matter of Government policy, see PINS Advice Note 10.

European Economic Area (EEA) States. Only UK European sites and qualifying features are addressed in this RIES.

1.2 Documents used to inform this RIES

- 1.2.1 The Applicant concluded that there would be no LSE on European sites and qualifying features, alone or in-combination with other plans and projects. In that regard the Applicant submitted a No Significant Effects Report (NSER) with the DCO application [**APP-098**], in support of this conclusion.
- 1.2.2 The Relevant Representation (RR) made by NE [**RR-010**] (26 February 2021) prior to the Examination explained that NE was satisfied with the European sites and qualifying features considered, and the conclusions reached in the NSER [**APP-098**].

Procedural Deadline A (8 April 2021)

- 1.2.3 The Applicant provided a revised version of the NSER [PDA-015] in response to Section 51 Advice [PD-002] and the Section 55 Checklist [PD-012] issued by the Inspectorate in accepting the DCO application for Examination. The revised version of the NSER [PDA-015] included additional cross referencing to the Environmental Statement (ES) documentation in support of the conclusion of no LSE on European sites and qualifying features. The revised version of the NSER [PDA-015] also corrected technical/formatting errors identified in the version originally submitted with the DCO Application [APP-098].
- 1.2.4 The NSER [**PDA-015**] submitted at Procedural Deadline A supersedes the version submitted at the start of Examination [**APP-098**]. However, the conclusions reached in the revised NSER [**PDA-015**] remained unchanged from those previously reported in the original NSER [**APP-098**] submitted with the DCO application.

Deadline 2 (24 May 2021)

- 1.2.5 The Applicant's Response to ExAs First Written Question (ExQ1) 1.1.9 [REP2-022] provided additional information regarding the scope of the In-combination Assessment and clarified that consideration of other projects and plans had not been limited to other solar developments. In addition, North Lincolnshire Council's (NLCs) response to ExQ1 1.1.10 [REP2-027] stated that NLC was unaware of any other projects that should have been included in the Applicant's In-combination Assessment.
- 1.2.6 Appendices 8 to 10 of the Applicant's response to ExQ1 1.5.8 [**REP2-022**] provided maps and citations for the Humber Estuary Special Area of Conservation ('the SAC'), the Humber Estuary Special Protection Area ('the SPA') and the Humber Estuary Ramsar site ('the Ramsar site').
- 1.2.7 The Applicant's Response to ExQ1 1.5.9 [REP2-022] provided additional information regarding LSE of the Proposed Development on lapwing, which are listed in the Assemblage Qualification for the SPA under Article 4.2 of the Habitats Directive. Lapwing were recorded within the Order Limits for the Proposed Development during Wintering Bird Surveys (WBS) [APP-092] and Breeding Bird Surveys (BBS) [APP-093].

1.2.8 The Applicants Response to ExQ1 1.5.9 [**REP2-022**] explains why the Applicant considers that the land within the Order Limits does not represent functionally linked habitat for the SPA.

Deadline 4 (7 July 2021)

- 1.2.9 Appendix 1 of the Applicant's Post Hearing Submissions for Issue Specific Hearing 2 (ISH2) [**REP4-017**] provided a more detailed explanation as to why the Applicant considered that land within the Order Limits does not represent functionally linked habitat for the SPA. In REP4-017 the Applicant provided additional evidence to support its conclusion that the Proposed Development would not result in LSE on species listed in the Assemblage Qualification for the SPA.
- 1.2.10 The recently submitted DCO application for the proposed Keadby 3 Low Carbon Gas Power Station Project ('Keadby 3') and the potential for additional in-combination effects with the Proposed Development was raised by the ExA under Agenda Item 3(g) at ISH2 [EV-015]. In the covering letter accompanying the Applicant's post ISH2 submissions [REP4-001] the Applicant provided a preliminary assessment of the potential in-combination effects for the Proposed Development and Keadby 3. The Applicant's preliminary assessment [REP4-001] concluded that the Proposed Development is unlikely to result in LSE in-combination with Keadby 3.
- 1.2.11 The Applicant submitted an agreed Statement of Common Ground (SoCG) with NE [**REP4-013**] which states that NE is satisfied with the Applicant's conclusion that there would be no LSE on the SPA.

Deadline 5 (9 August 2021)

- 1.2.12 At this Examination Deadline the Applicant submitted a revised NSER [**REP5-015**], albeit the revisions made in this version of the NSER only concerned how grassland management would be undertaken if sheep grazing was not to occur.
- 1.2.13 The Applicant's Cumulative Effects Assessment (CEA) Post Submission Review of Keadby 3 ('the Keadby 3 CEA') [REP5-021] has provided a more detailed assessment of the potential in-combination effects for the Proposed Development and Keadby 3. The location of Keadby 3 is presented in Appendix 1 of the Keadby 3 CEA [REP5-021]. In addition, the Keadby 3 CEA also considered the potential in-combination effects for the Proposed Development and Able Marine Energy Park Material Change 2 (AMEPMC2) which was submitted for the SoS's consideration on 25 June 2021.
- 1.2.14 For those European sites and qualifying features where the Applicant's conclusions regarding LSE have been subject to enquiry during Examination, the Applicant's Screening Matrices, included in the NSER **[REP5-015]**, have been updated by the ExA, with the support of the EST, using relevant documents included in the <u>Little Crow Solar Park Examination Library</u>. The revised Screening Matrices are included as Annex 1 to this RIES.

Deadline 6 (31 August 2021)

- 1.2.15 NE's response to ExAs Further Written Questions (ExQ3) 3.5.1 [REP6-O23] states that NE agreed with the conclusions reached in the Applicant's NSER [REP5-O15] that the Proposed Development is unlikely to result in LSE on the interest features of the SPA either alone or in-combination with other plans and/or projects. In addition, NE's response to ExQ3 3.5.1 [REP6-O23] also explains how species listed in the Assemblage Qualification for the SPA should be considered for the purposes of the HRA.
- 1.3 Structure of this RIES
- 1.3.1 **Section 2 Overview:** Identifies the European sites and qualifying features that have been considered within the DCO application up to and including Deadline 6 of Examination. It provides an overview of the issues that have emerged during the Examination process.
- 1.3.2 **Section 3 Likely Significant Effects:** Identifies the European sites and qualifying features considered in the Habitats Regulation Assessment (HRA) Stage 1 Screening Assessment for potential LSE, either alone or incombination with other projects and plans. This section also identifies matters relating to the Applicants NSER **[REP5-015]** which have been subject to discussion during Examination.
- 1.3.3 Annex 1 HRA Stage 1 Matrices: Screening for Likely Significant Effects: Comprises of HRA Stage 1 Screening Assessment ('the Screening Assessment') matrices for those European sites and qualifying features for which the Applicant's conclusions were questioned in relation to the potential LSE of the Proposed Development. They summarise the evidence submitted by the Applicant and IPs up to and including Deadline 6 of the Examination.

2 OVERVIEW

2.1 European Sites Considered

- 2.1.1 The Applicant's NSER **[REP5-015]** demonstrates that the Proposed Development is not connected with or necessary to the management for nature conservation of the European sites included in the Screening Assessment (see Table 2.1). The reasons for this conclusion are discussed further in Section 3 of this RIES.
- 2.1.2 In paragraph of 1.1.16 of the NSER [**REP5-015**] it is stated that European Sites within 10km of the Proposed Development were considered in the Screening Assessment and that the 10km screening distance represents the '... maximum likely distance over which impacts could reasonably be foreseen to occur'.
- 2.1.3 The NSER [**REP5-015**] states that the potential impacts of the Proposed Development considered in the Screening Assessment are as follows:
 - direct physical effects, including habitat loss, habitat fragmentation and displacement;
 - disturbance as a result of noise;

- changes in water quality; and
- in-combination effects.
- 2.1.4 The agreed SoCG with NE [**REP4-013**] states that the 10km screening distance adopted by the Applicant for the purposes of the Screening Assessment, was considered appropriate for the Proposed Development by NE. In addition, the 10km screening distance has not been disputed by other IPs at this stage in examination.
- 2.1.5 The Inspectorate notes that the HRA Screening Matrix 02: Humber Estuary SPA in the NSER [**REP5-015**] states that the SPA is located 11km north of the Proposed Development which is beyond the 10km Screening Distance adopted for the Screening Assessment. However, the Applicant has included the SPA in Screening Assessment on a precautionary basis.

European Site	Qualifying Feature(s)
Humber Estuary SAC	Estuaries
	Mudflats and sandflats not covered by seawater at low tide
	Sandbanks which are slightly covered by sea water all the time
	Coastal lagoons * Priority feature
	Salicornia and other annuals colonizing mud and sand
	Atlantic salt meadows
	Embryonic shifting dunes
	"Shifting dunes along the shoreline with Ammophila arenaria (""white dunes"")"
	"Fixed coastal dunes with herbaceous vegetation (""grey dunes"")" * Priority feature
	Dunes with Hippopha rhamnoides
	Sea lamprey
	River lamprey
	Grey seal
Humber Estuary SPA	Great Bittern (breeding and non- breeding)
	Common shelduck (non-breeding)
	Eurasian marsh harrier (breeding)

Table 2.1: European Sites and Qualifying Features included in theScreening Assessment:

	Hen harrier (non-breeding)
	Pied avocet (breeding and non-breeding)
	European golden plover (non-breeding)
	Red knot (non-breeding)
	Dunlin (non-breeding)
	Ruff (non-breeding)
	Black-tailed godwit (non-breeding)
	Bar-tailed godwit (non-breeding)
	Common redshank (non-breeding)
	Little tern (breeding)
	Waterbird assemblage
Humber Estuary Ramsar site	Ramsar Criterion 1: Near-natural estuary, including; dune systems, humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons
	Ramsar Criterion 3: Supports the second largest breeding colony of grey seals in England.
	Ramsar Criterion 5: Supports an assemblage of waterfowl (non-breeding) of international importance.
	Ramsar Criterion 6: Supports species/ populations of waterfowl occurring at levels of international importance.
	Ramsar Criterion 8: Migration route for river lamprey and sea lamprey between coastal waters and spawning areas.

- 2.1.6 The location and geographic extent of the SAC, SPA and Ramsar site are illustrated in Appendix 8, Appendix 9 and Appendix 10 of the Applicant's Response to ExQ1 [**REP2-022**]. In addition, those appendices include the citations for each of the European sites considered in the Screening Assessment.
- 2.1.7 The RR [**RR-010**] made by NE and the SoCG between NE and the Applicant [**REP4-013**] indicate that NE had not identified any other European sites or qualifying features that could be affected by the Proposed Development and which required consideration in the Applicant's Screening Assessment. In addition, the European sites and qualifying features considered in the Screening Assessment have not been disputed by IPs at this stage in Examination.

2.2 HRA Matters Considered During the Examination

- 2.2.1 The following HRA matters were raised by the ExA and considered during the Examination:
 - The ExA raised concerns in ExQ1 [**PD-007**] regarding the potential impact of the Proposed Development on lapwing, which were recorded on site during WBS [**APP-092**] and BBS [**APP-093**] and are listed in the Assemblage Qualification for the SPA under Article 4.2 of the Directive.
 - In ExQ1 [**PD-007**] the ExA enquired if the scope of the Incombination Assessment included in the NSER [**REP5-015**] had been limited to other solar developments within 10km of the Proposed Development, namely Raventhorpe Farm, Flixborough Solar Farm and Conesby Solar Farm.
 - Under Agenda Item 3(g) ISH2 [**EV-015**] the ExA invited the Applicant to consider the potential for in-combination effects between the Proposed Development and Keadby 3.
- 2.2.2 The HRA matters outlined above are discussed in Section 3 of this RIES.

3 LIKELY SIGNIFICANT EFFECTS

3.1 The Applicant's Assessment

- 3.1.1 The Applicant has described how it has determined what would constitute a 'significant effect' within the NSER [REP5-015]. This follows European Commission (EC) guidance on habitats assessment (EC Guidance document: 'Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (2018)' and EC Guidance document: 'Assessment of plans and projects significantly affecting Natura 2000 sites (2001)').
- 3.1.2 The Applicant's conclusions regarding the LSE of the Proposed Development on European sites and qualifying features, alone and incombination with other plans and projects, are presented in Section 2 of the NSER [**REP5-015**].

Humber Estuary SPA Waterbird Assemblage

- 3.1.3 The NSER [**REP5-015**] states that WBS [**APP-092**] and BBS [**APP-093**] recorded no qualifying features of the SPA within the Order Limits. However, the WBS [**APP-092**] recorded 77 (survey visit one) and 109 (survey visit two) lapwing within the Order Limits during two of the four surveys undertaken. The BBS [**APP-093**] recorded low numbers of lapwing (peak count of seven) within the Order Limits during each of the four surveys undertaken.
- 3.1.4 The ExA requested in ExQ1 1.5.9 [**PD-007**] that the Applicant provide further clarification regarding the potential impact of the Proposed

Development on lapwing, which are listed as an Assemblage Qualification species for the SPA under Article 4.2 of the Directive. The Applicant's response to ExQ1 1.5.9 [**REP2-022**] explained why land within the Order Limits was unlikely to represent functionally linked habitat for the SPA's Waterbird Assemblage. The reasons for this conclusion are explained in greater detail in Appendix 1 to Applicant's post ISH2 written submissions [**REP4-017**] and are as follows:

- Lapwing are not listed as a qualifying species in the citation for the SPA, and are only included in the Assemblage Qualification under Article 4.2 of the Directive (79/409/EEC).
- The WBS [**APP-092**] recorded a peak count of 109 lapwing which represents 0.4% of the population associated with the SPA, and therefore an insignificant proportion (less than 1%) of the total population.
- Lapwing were absent during two of four of the WBS [**APP-092**] suggesting casual use of land within the Order Limits during the winter months.
- Lapwing were widespread and ubiquitous across farmland, resulting in uncertainty as to whether the lapwing populations recorded within the Order Limits during WBS [**APP-092**] were linked to the SPA population.
- 3.1.5 The ExA requested in ExQ3 3.5.1 [PD-013] that NE advise whether it agreed or disagreed with the Applicant's conclusion that the Proposed Development was unlikely to result in LSE on the interest features of the SPA. NE's response to ExQ3 3.5.1 [REP6-023] states that NE agreed with the conclusions reached in the Applicant's NSER [REP5-015] that the Proposed Development would be unlikely to result in LSE on the interest features of the SPA either alone or in-combination with other plans and/or projects.
- 3.1.6 The ExA also requested in ExQ3 3.5.1 [**PD-013**] that NE advise on how species listed in the Assemblage Qualification for the SPA should be considered for the purposes of the HRA. NE's response to ExQ3 3.5.1 [**REP6-023**] states the following in this regard:
 - Important component species are defined as all species listed in the citation as well as those occurring at the site at a level of 1% or more of the national population (or where more than 2000 individuals are present).
 - If 1% of the estuary population for an individual assemblage species is identified, then the site could be significant for this species and an Appropriate Assessment should be undertaken.
 - The 1% is a guidance threshold for most assemblage species. Where species are demonstrating critical declines at the site level exceptions to the 1% threshold are made.

Scope of the In-combination Assessment

- 3.1.7 The NSER [**REP5-015**], when read in conjunction with section 7.9 of Chapter 7 of the ES (Ecology and Nature Conservation) [**REP5-010**], demonstrates that the Applicant only considered the following large-scale solar operations within 10km of the Proposed Development in the Incombination Assessment:
 - Raventhorpe Farm An active solar array with a generating capacity of 38 megawatts (MW) located 230 metres south of the Proposed Development;
 - Flixborough Solar Farm An active solar array with a generating capacity of 5.99 MW located 7.29km north west of the Proposed Development; and
 - Conesby Solar Farm A site with an extant planning permission for the installation of a solar array with a generating capacity of 50 MW located 4.5km north west of the Proposed Development.
- 3.1.8 The ExA requested in ExQ1 1.1.9 [**PD-007**] that the Applicant explain if other types of development had been considered in the In-combination assessment. The Applicant's response to ExQ1 1.1.9 [**REP2-022**] states that the scope of the In-combination assessment was not limited to solar development and that the Applicant was unaware of other projects that needed to be considered.
- 3.1.9 The ExA requested in ExQ1 1.1.10 [**PD-007**] that NLC identify any existing or proposed development that should have been included in the Applicant's In-combination Assessment. NLC's response to ExQ1 1.1.10 [**REP2-027**] advised that no additional existing or proposed developments needed to be included in the Applicant's assessment of in-combination effects.
- 3.1.10 The ExA requested at ISH2 [EV-015] that the Applicant consider the potential in-combination effects between the Proposed Development and Keadby 3. The Applicant's preliminary written response to that request [REP4-001] concluded that the Proposed Development is unlikely to result in LSE in-combination with Keadby 3.
- 3.1.11 At Deadline 5 the Applicant provided a more detailed assessment of the potential in-combination effects between the Proposed Development and Keadby 3 [REP5-021]. In addition, paragraph 1.30 of the Keadby 3 CEA [REP5-021] also provides an assessment of the potential in-combination effects between the Proposed Development and AMEPMC2.
- 3.1.12 The Applicant has concluded in the Keadby 3 CEA [**REP5-021**] that the Proposed Development is unlikely to result in LSE in-combination with Keadby 3 and AMEPMC2. The reasons for that conclusion include:
 - The Proposed Development is located approximately 10km and 24km from Keadby 3 and AMEPMC2 respectively. Therefore, Keadby 3 and AMEPMC2 are situated beyond the Zone of Influence (ZoI) for the Proposed Development with respect to noise, vibration and air quality effects.

- The <u>Keadby 3 Screening Assessment</u> and <u>AMEPMC2 HRA</u> only identify potential LSE on the qualifying features of the SAC and Ramsar site (see Table 2.1), which are not present within the Order Limits of the Proposed Development.
- The Proposed Development will not impact upon surrounding watercourses and would be sufficiently distant from the River Trent and Humber Estuary as to avoid a potential impact pathway to the SAC and Ramsar site.
- No potential additional effects on Lapwing through disturbance above that consented in the DCO for AMEPMC2 (for which mitigation measures have been agreed) are anticipated.
- 3.1.13 The SoCG between NE and the Applicant [**REP4-013**] indicates that NE was content that the Applicant had undertaken an adequate Incombination Assessment. In addition, the Applicant's approach to the Incombination Assessment has not been disputed by other IPs at this stage in examination.

Conclusions of the HRA Stage 1 Screening Assessment

- 3.1.14 The Applicant considered the following European sites in the HRA Stage 1 Screening Assessment [Table 2.1 in **REP5-015**]:
 - Humber Estuary SAC;
 - Humber Estuary SPA; and
 - Humber Estuary Ramsar site.
- 3.1.15 The NSER [**REP5-015**] concluded that construction, operation and decommissioning of the Proposed Development would not result in LSE, alone or in-combination with other plans or projects, on the qualifying features of the SAC, SPA and Ramsar site (see Annex I of this RIES).
- 3.1.16 In light of the European Court of Justice (ECJU) ruling in 'People Over Wind and Peter Sweetman v Coillte Teoranta'; paragraph 1.1.20 of the NSER [REP5-015] states that the Screening Assessment has not considered mitigation proposals included as part of the Proposed Development.
- 3.1.17 The IPs, including NE, have not disputed the Applicant's conclusion that the Proposed Development would not result in LSE on the European sites and qualifying features listed above at this stage in Examination.

Report on the Implications for European Sites for Little Crow Solar Park

ANNEX 1: HRA STAGE 1 MATRICES: SCREENING FOR LIKELY SIGNIFICANT EFFECTS

HRA Stage 1 Matrices: Screening for Likely Significant Effect

This annex of the RIES identifies the European sites and qualifying features for which the Applicant's conclusions were questioned by the ExA during the Examination of the DCO application. Therefore, the Applicant's Screening Matrices included the NSER [**REP5-015**] have been revised by the Planning Inspectorate where relevant.

Key to Matrices:

- × No Likely Significant Effects (LSE)
- C Construction
- O Operation
- D Decommissioning

Information supporting the conclusions is detailed in footnotes for each table with reference to relevant supporting documentation. Where an impact is not considered relevant for a feature of a European Site the cell in the matrix is formatted as follows:

n/a

Matrices presented in this Annex:

- Stage 1 Matrix 1: The Humber Estuary SAC;
- Stage 1 Matrix 2: The Humber Estuary SPA; and
- Stage 1 Matrix 3: The Humber Estuary Ramsar Site.

HRA Stage 1 Matrix 1: Humber Estuary SAC

Site Code: UK0030170

Distance to the Proposed Development: 8.1km (see Appendix 8 [REP2-022])

Qualifying	Likely Effects of NSIP												
feature(s)	Direct physical effects, habitat loss, habitat fragmentation and displacement (a)				Disturbance as a result of noise (b)			Changes in water quality (c)			In-combination Effects (d)		
	С	0	D	С	0	D	С	0	D	С	0	D	
Estuaries (1130)	х	х	х	х	х	х	х	х	х	x	x	х	
Mudflats and sandflats not covered by seawater at low tide (1140)	x	x	x	x	x	x	x	x	x	x	x	x	
Sandbanks which are slightly covered by sea water all the time (1110)	x	x	x	x	x	x	x	x	x	x	x	x	
Coastal lagoons * Priority feature (1150)	х	х	х	х	х	x	x	x	x	x	x	x	
Salicornia and other annuals colonizing mud and sand (1310)	x	x	x	x	x	x	x	x	x	x	x	x	

						1		1		1	1	
Atlantic salt meadows (1330)	х	х	x	х	х	х	х	х	х	х	х	х
Embryonic shifting dunes (2110)	x	x	x	x	x	х	x	x	х	x	x	х
"Shifting dunes along the shoreline with Ammophila arenaria (""white dunes"")" (2120)	x	x	x	x	x	х	х	х	x	х	х	x
"Fixed coastal dunes with herbaceous vegetation (""grey dunes"")" * Priority feature (2130)	x	x	x	x	x	x	x	x	x	x	x	x
Dunes with Hippopha rhamnoides (2160)	x	x	x	x	x	x	x	x	x	x	x	x
Sea lamprey (1095)	х	x	х	х	х	х	х	x	х	x	x	х
River lamprey (1099)	х	x	х	х	х	х	х	х	х	x	х	х
Grey seal (1364)	х	х	х	х	х	х	х	х	х	х	х	х

Evidence supporting conclusions

a) The NSER [**REP5-015**] concludes that, due to the distance between the Proposed Development and Humber Estuary SAC, no direct physical effects, habitat loss, habitat fragmentation or displacement would be likely to occur on the qualifying

features of Humber Estuary SAC during construction, operation and decommissioning of the Proposed Development. This conclusion has not been disputed by IPs at this stage in Examination.

- b) The NSER [REP5-015] states that no significant noise effects are anticipated during construction, operation and decommissioning of the Proposed Development. The Noise Impact Assessment, Appendix 4.9, ES [REP2-014] concludes that there would be no significant effects of noise during construction, operation and decommissioning of the Proposed Development. The NSER [REP5-015] concludes that, due to the distance between the Proposed Development and Humber Estuary SAC, noise generated within the Proposed Development boundary is unlikely to significantly affect the qualifying features of Humber Estuary SAC during the construction, operation and decommissioning of the Proposed Development. This conclusion has not been disputed by IPs at this stage in Examination.
- c) The NSER [REP5-015] states that the Proposed Development is located within the catchment of the Humber Estuary and hydrologically connected to the Humber Estuary SAC. The NSER [REP5-015] explains that the installation of the Proposed Development will result in a reduction in surface water runoff and an improvement in the quality of water entering the receiving environment in comparison to the site's existing agricultural usage. The Flood Risk and Drainage Strategy (FRADS) [APP-072] states that the Proposed Development will reduce surface water runoff by eliminating compaction of soils and improve water quality through the installation of swales, ceasing the application of pesticides and fertilisers, and the implementation of a management programme to maintain the status of watercourses. The NSER [REP5-015] concludes that, due to the distance between the Proposed Development and Humber Estuary SAC, changes in water quality as a result of the Proposed Development would be unlikely to significantly affect the qualifying features of Humber Estuary SAC during the construction, operation and decommissioning phase. This conclusion has not been disputed by IPs at this stage in Examination.
- d) The Keadby 3 Cumulative Effects Assessment (CEA) [REP5-021] concluded that the Proposed Development is unlikely to result in LSE in-combination with Low Carbon Gas Power Station Project (Keadby) 3 and Able Marine Energy Park Material Change 2 (AMEPMC2). The reasons for this conclusion include:
 - The Proposed Development is located approximately 10km and 24km from Keadby 3 and AMEPMC2 respectively. Therefore, Keadby 3 and AMEPMC2 are situated beyond the ZoI of the Proposed Development with respect to noise, vibration and air quality effects.

- The <u>Keadby 3 Screening Assessment</u> and <u>AMEPMC2 HRA</u> only identify potential LSE on the qualifying features of the SAC and Ramsar site (see Table 2.1) which are not present within the order limits of the Proposed Development.
- The Proposed Development will not impact surrounding watercourses and is sufficiently distant from the River Trent and Humber Estuary as to avoid a potential impact pathway to the SAC and Ramsar site.
- No potential additional effects on Lapwing through disturbance above that consented in the DCO for AMEPMC2 (for which mitigation measures have been agreed) are anticipated.

The NSER [**REP5-015**] concludes that the Proposed Development is unlikely to result in LSE, alone and in-combination with other plans or projects, on the qualifying features of Humber Estuary SAC during the construction, operation and decommissioning phase. This conclusion has not been disputed by IPs at this stage in Examination.

HRA Stage 1 Matrix 2: Humber Estuary SPA

Site Code: UK9006111

Distance to project: 11km (see Appendix 9 [REP2-022])

European site	Likely	Likely Effects of NSIP												
feature(s)	Direct physical effects, habitat loss, habitat fragmentation and displacement (a)			Disturbance as a result of noise (b)			Changes in water quality (c)			In-combination Effects (d)				
	С	0	D	С	0	D	С	0	D	С	0	D		
Great Bittern (breeding and non- breeding) (A021)	х	x	x	x	x	х	х	х	x	х	х	x		
Common shelduck (non- breeding) (A048)	x	x	x	x	x	x	x	х	х	х	х	x		

Eurasian marsh harrier (breeding)	x	х	x	x	x	x	x	x	х	x	x	x
(A081)												
Hen harrier (non- breeding) (A082)	x	x	x	х	х	х	х	х	х	х	х	х
Pied avocet (breeding and non- breeding) (A132)	x	x	x	x	x	х	х	х	х	x	х	x
European golden plover (non- breeding) (A140)	x	x	x	x	x	х	х	х	х	x	х	x
Red knot (non- breeding) (A143)	x	x	x	х	х	х	х	x	x	х	x	x
Dunlin (non- breeding) (A149)	x	x	x	х	х	х	х	х	x	x	х	x
Ruff (non- breeding) (A151)	x	x	x	x	x	х	х	х	х	х	х	x
Black-tailed godwit (non- breeding) (A156)	x	x	x	x	x	х	х	х	х	x	х	х
Bar-tailed godwit (non-breeding) (A157)	x	x	x	х	х	х	х	х	x	x	х	x
Common redshank (non- breeding) (A162)	×	x	×	x	x	х	х	х	х	х	х	x
Little tern (breeding) (A195)	x	х	x	x	x	х	х	х	х	х	х	x
Waterbird assemblage	X (e)											

Evidence supporting conclusions

- a) Refer to Evidence supporting conclusions (a), HRA Stage 1 Matrix: Humber Estuary SAC as the same evidence has been relied upon to support conclusions of no LSE on the qualifying features of Humber Estuary SPA.
- **b)** Refer to Evidence supporting conclusions (b), HRA Stage 1 Matrix: Humber Estuary SAC as the same evidence has been relied upon to support conclusions of no LSE on the qualifying features of Humber Estuary SPA.
- c) Refer to Evidence supporting conclusions (c), HRA Stage 1 Matrix: Humber Estuary SAC as the same evidence has been relied upon to support conclusions of no LSE on the qualifying features of Humber Estuary SPA.
- **d)** Refer to Evidence supporting conclusions (d), HRA Stage 1 Matrix: Humber Estuary SAC as the same evidence has been relied upon to support conclusions of no LSE on the qualifying features of Humber Estuary SPA.
- e) The Applicants Response to ExQ1 1.5.9 [REP2-022] and post ISH2 submissions [Appendix 1 in REP4-017] state that the Proposed Development site is unlikely to represent functionally linked habitat for the Humber Estuary SPA for the following reasons:
 - Lapwing are not listed as qualifying species in the citation for the Humber Estuary SPA but are included in the Assemblage Qualification under article 4.2 of the Directive (79/409/EEC) [Appendix 9 of REP2-022].
 - The Winter Breeding Survey (WBS) [**APP-092**] recorded a peak count of 109 Lapwing which represents 0.4% of the population associated with Humber Estuary SPA, and therefore an insignificant proportion (less than 1%) of the total population.
 - Lapwing were absent during two of four of the WBS [**APP-092**] which suggests casual use of the Proposed Development site during the winter months.
 - Lapwing were widespread and ubiquitous across farmland, resulting in uncertainty as to whether Lapwing populations recorded during WBS [**APP-092**] were linked to the Humber Estuary SPA population.

The NSER [**REP5-015**] and Appendix 1 in [**REP4-017**] conclude that no LSE on the waterbird assemblage of the Humber Estuary SPA is likely to occur during the construction, operation and decommissioning of the Proposed Development. This conclusion has not been disputed by IPs at this stage in Examination.

HRA Stage 1 Matrix 3: Humber Estuary Ramsar Site

Site Code: UK11031

Distance to project: 8.1km (see Appendix 10 [REP2-022])

European site	Likely Effects of NSIP												
feature(s)	Direct physical effects, habitat loss, habitat fragmentation and displacement (a)				Disturbance as a result of noise (b)			Changes in water quality (c)			In-combination Effects (d)		
	С	0	D	С	0	D	С	0	D	С	0	D	
Ramsar Criterion 1: Near-natural estuary, including; dune systems, humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons	x	X	x	x	x	x	x	X	X	X	X	X	
Ramsar Criterion 3: Supports the second largest breeding colony of grey seals in England.	x	x	x	x	×	x	x	x	x	x	x	x	

Ramsar Criterion 5: Supports an assemblage of waterfowl (non- breeding) of international importance.	x	x	x	x	x	x	x	x	x	x	x	x
Ramsar Criterion 6: Supports species/ populations of waterfowl occurring at levels of international importance.	x	x	x	x	x	x	x	x	x	x	x	x
Ramsar Criterion 8: Migration route for river lamprey and sea lamprey between coastal waters and spawning areas.	x	x	x	x	x	x	x	x	x	x	x	x

Evidence supporting conclusions

- a) Refer to Evidence supporting conclusions (a), HRA Stage 1 Matrix: Humber Estuary SAC as the same evidence has been relied upon to support conclusions of no LSE on the qualifying features of Humber Estuary Ramsar site.
- **b)** Refer to Evidence supporting conclusions (b), HRA Stage 1 Matrix: Humber Estuary SAC as the same evidence has been relied upon to support conclusions of no LSE on the qualifying features of Humber Estuary Ramsar site.

- c) Refer to Evidence supporting conclusions (c), HRA Stage 1 Matrix: Humber Estuary SAC as the same evidence has been relied upon to support conclusions of no LSE on the qualifying features of Humber Estuary Ramsar site.
- d) Refer to Evidence supporting conclusions (d), HRA Stage 1 Matrix: Humber Estuary SAC as the same evidence has been relied upon to support conclusions of no LSE on the qualifying features of Humber Estuary Ramsar site.