



The Planning Inspectorate  
Yr Arolygiaeth Gynllunio

# **REPORT on the IMPLICATIONS for EUROPEAN SITES**

## **Proposed Drax Re-Power**

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

Planning Inspectorate Reference: EN010091

28 February 2019

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# 1 INTRODUCTION

## 1.1 Background

- 1.1.1 Drax Power Limited (the Applicant) has applied to the Secretary of State for a development consent order (DCO) under section 37 of the Planning Act 2008 (PA2008) for the proposed Drax Re-Power (the application). The Secretary of State has appointed an Examining Authority (ExA) to conduct an Examination of the application, to report its findings and conclusions, and to make a recommendation to the Secretary of State as to the decision to be made on the application.
- 1.1.2 The relevant Secretary of State is the competent authority for the purposes of the Habitats Directive<sup>1</sup> and the Habitats Regulations<sup>2</sup> for applications submitted under the PA2008 regime. The findings and conclusions on nature conservation issues reported by the ExA will assist the Secretary of State in performing their duties under the Habitats Regulations.
- 1.1.3 This report compiles, documents and signposts information provided within the DCO application, and the information submitted throughout the Examination by both the Applicant and Interested Parties (IPs), up to Deadline 7 of the Examination (20 February 2019) in relation to potential effects to European Sites<sup>3</sup>. It is not a standalone document and should be read in conjunction with the Examination documents referred to. Where document references are presented in square brackets [] in the text of this report, that reference can be found in the Examination library published on the National Infrastructure Planning website at the following link:  
<http://infrastructure.planninginspectorate.gov.uk/document/EN010091-000507>
- 1.1.4 It is issued to ensure that Interested Parties including the statutory nature conservation body Natural England (NE) is consulted formally on Habitats Regulations matters. This process may be relied on by the Secretary of State for the purposes of Regulation 63(3) of the Habitats Regulations. Following consultation, the responses will be considered by the ExA in making their recommendation to the Secretary of State and made available to the Secretary of State along with this report. The RIES will not be revised following consultation.
- 1.1.5 The Applicant has not identified any potential impacts on European sites in other EEA States<sup>4</sup>. Only UK European sites are addressed in this report.

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<sup>1</sup> 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').

<sup>2</sup> The Conservation of Habitats and Species Regulations 2017 (the Habitats Regulations).

<sup>3</sup> 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.

<sup>4</sup> European Economic Area (EEA) States.

## 1.2 Documents used to inform this RIES

### Application

- 1.2.1 The Applicant provided a Habitats Regulations Assessment (HRA) report entitled Habitats Regulations Assessment Report [APP-134] with the DCO application, together with screening and integrity matrices. The Applicant's DCO application concluded that there is the potential for likely significant effects on ten European site(s). Appendix 3 to the HRA report containing Site of Special Scientific Interest (SSSI) Condition Assessments was noted to be missing from the application submission. Appendix 3 - SSSI Condition Assessments was submitted and accepted as an additional submission at the pre-Examination stage [AS-015].

### Examination

- 1.2.2 In response to the ExA's questions and representations made by Interested Parties during the Examination, the Applicant provided revised HRA screening and integrity matrices at Deadline 2 (8 November 2018) (see BHR - Appendix C to the Applicant's Responses to Written Questions [REP2-035]) and an updated HRA report at Deadline 3 (22 November 2018) [REP3-017]. A further updated HRA report was submitted at Deadline 6 (30 January 2019) [REP6-006], supported by revised HRA screening matrices [REP6-007] and integrity matrices [REP6-008].
- 1.2.3 The full list of documents and hearing recordings referred to in this report are listed in Annex 1.

## 1.3 Structure of this RIES

- 1.3.1 The remainder of this report is as follows:
- **Section 2** identifies the European sites that have been considered within the DCO application and during the Examination period, up to 20 February 2019. It provides an overview of the issues that have emerged during the Examination.
  - **Section 3** identifies the European sites and qualifying features screened by the Applicant for potential likely significant effects, either alone or in-combination with other projects and plans. This section also identifies where Interested Parties have disputed the Applicant's conclusions, together with any additional European sites and qualifying features screened for potential likely significant effects during the Examination.
  - **Section 4** identifies the European sites and qualifying features which have been considered in terms of adverse effects on site integrity, either alone or in-combination with other projects and plans. The section identifies where Interested Parties have disputed the Applicant's conclusions, together with any additional European sites and qualifying features considered for adverse effects on integrity during the Examination.

- **Annex 1** lists all documents used to inform the RIES.
- **Annex 2** lists the sites and qualifying features considered for during the Examination. It also identifies which sites and features the Applicant concluded would be likely to experience significant effects, the consideration of potential adverse effects on site integrity and the views of NE and other Interested Parties on the Applicant's conclusion.
- **Annex 3** provides a link to the HRA screening and integrity matrices submitted by the Applicant at Deadline 6 [REP6-007 and REP6-008].

## 2 OVERVIEW

### 2.1 European sites considered

2.1.1 The Proposed Development is not connected with or necessary to the management for nature conservation of any of the European sites considered within the Applicant's HRA.

2.1.2 The Applicant provided an HRA report [APP-134] with the DCO application, which identified a total of ten European sites for inclusion within the assessment. As a result of the ExA's questions during the Examination and also following a non-material change request for proposed design amendments submitted by the Applicant at Deadline 3 [REP3-001], updates to the Applicant's HRA report were provided to the Examination at Deadline 3 [REP3-017] and at Deadline 6 [REP6-006], alongside updated HRA screening and integrity matrices [REP6-007 and REP6-008]. Unless otherwise stated, references in the RIES to the Applicant's HRA report are to the latest revised HRA report [REP6-006]. The updates to the HRA report did not result in changes to the European sites considered in the Examination; however, see Section 3 of the RIES below for further discussion of qualifying features.

2.1.3 The ten European sites considered by the Applicant are:

- Lower Derwent Valley Special Area of Conservation (SAC);
- Lower Derwent Valley Special Protection Area (SPA);
- Lower Derwent Valley Ramsar;
- River Derwent SAC;
- Humber Estuary SAC;
- Humber Estuary SPA;
- Humber Estuary Ramsar;
- Skipwith Common SAC;
- Thorne and Hatfield Moors SPA; and
- Thorne Moor SAC.

2.1.4 The locations of these European sites relative to the Proposed Development are illustrated on Figure 2.1 of the HRA report [REP6-006].

2.1.5 The full list of these sites and their qualifying features is included as a table in Annex 2 to this report. This table also identifies whether the NE and other IPs agreed with or disputed the Applicant's conclusions.

### 2.2 Assessment Methodology

2.2.1 Sections 2.1 and 2.2 of the HRA report [REP6-006] outline the Applicant's approach to HRA screening, including how the Applicant has identified European sites for inclusion in the screening assessment.



- 2.2.2 The Applicant confirmed in the HRA report [REP6-006] that their Stage 1 screening has been carried out without taking account of the measures intended to avoid or reduce the harmful effects of the project on European Sites in accordance with the recent European Court of Justice case in *People Over Wind and Sweetman v Coillte Teoranta* (Case 323/17).
- 2.2.3 The HRA report [REP6-006] identified an initial zone of influence (Zol) within which the Proposed Development could conceivably impact European Sites, either alone or in-combination with other policies, plans and projects. This Zol was set at 15km from the centre of the stacks of the proposed gas turbines within the boundary of the Proposed Development.
- 2.2.4 The HRA report [REP6-006] confirmed that this corresponded to the maximum extent of air quality modelling, with air quality impacts predicted to have the largest Zol of all potential impacts, as at distances beyond 15km, the air quality impacts of the Proposed Development become effectively indiscernible from background air quality. Other potential effects, including disturbance effects to species using functionally linked land and hydrological links to European sites and functionally linked land, were considered and assessed within this Zol. The Statement of Common Ground (SoCG) between the Applicant and NE [REP1-004] confirmed NE's agreement that beyond 15km there are no conceivable impact pathways by which the Proposed Scheme could negatively affect European Sites.

#### **In-Combination Effects**

- 2.2.5 The Applicant's approach to assessing in-combination/cumulative effects are outlined in Section 3.3 of the HRA report [REP6-006] and in ES Chapter 17: Cumulative Assessment [APP-085]. Table 3-1 of the HRA report [REP6-006] lists the other plans and projects identified as being relevant to the in-combination assessment.
- 2.2.6 The Applicant identified in Environmental Statement (ES) Chapter 17 [APP-085] a number of other development proposals to be considered in the in-combination assessment. These were subject to an initial screening to assess whether, given the nature, location and scale of each proposal, they could produce impacts that combine with the impacts of the Proposed Development and lead to a likely significant effect on any of the ten European Sites (and qualifying features) considered.
- 2.2.7 In-combination effects for a total of 43 projects were screened by the Applicant in Table 3-1 of the HRA report [REP6-006]. Of these, potential in-combination effects were identified with the following two projects:
- Eggborough combined cycle gas turbine (CCGT) generating station; and
  - Thorpe Marsh Power Station.
- 2.2.8 Both projects were identified for their potential to give rise to operational emissions, which could potentially combine with those from the Proposed Development leading to in-combination cumulative effects that could be significant. Emissions from Eggborough and Thorpe Marsh CCGTs were therefore considered quantitatively as part of the cumulative assessment and are reported in ES Chapter 6: Air Quality [APP-074].

- 2.2.9 In addition to those short-listed developments within 15km, due to their scale and nature, Knottingley Power Project and Ferrybridge D CCGT (located beyond 15 km from the Proposed Scheme but located within 15 km of the same European Sites located within 15 km of the Proposed Development) have been considered qualitatively within the air quality assessment. However, given that these developments are located more than 15km away from the Proposed Development and from the ecological receptors, the Applicant concluded that any impacts and in-combination effects would be imperceptible [REP6-006].
- 2.2.10 NE's Relevant Representation (RR) [RR-212] and the SoCG between the Applicant and NE [REP1-004] did not identify any areas of concern with regards to the Applicant's approach to the in-combination assessment.

## 2.3 Changes to the proposed development during the Examination

- 2.3.1 At Deadline 3 during the Examination, the Applicant submitted a non-material change request [REP3-001] to amend several design parameters. The proposed non-material amendments were set out in Table 2 of the document: Assessment of Non-Material Amendments to Proposed Scheme [REP3-022] and included amendments to the height of the proposed stacks. The proposed amendments were stated to be sought as a result of the ongoing iterative detailed design process and a correction to the stated height of the existing cooling towers due to a more refined cooling tower height above ordnance datum (AOD) and above ground level (AGL) being determined [REP3-001]. The non-material change request was accepted by the ExA on 15 January 2019 [PD-015]. The Applicant's draft DCO (dDCO) was amended to reflect these changes and are included in Schedule 13 of the latest dDCO [REP7-004].
- 2.3.2 Further discussion of the parameter changes and HRA matters is included at Section 4 of this report.

## 2.4 HRA matters considered during the Examination

- 2.4.1 As detailed further in Section 3 of this report, the Applicant's screening assessment identified the potential for likely significant effects, either alone or in-combination with other projects or plans, on all ten of the European sites considered in the HRA report [REP6-006].
- 2.4.2 The following key matters were discussed during the Examination:
- Correct qualifying features of European sites;
  - Air quality effects;
    - Parameter changes, including stack height; and
    - Selective Catalytic Reduction (SCR) and Ammonia Cap;
  - Disturbance and hydrological effects on otter and fish qualifying features using functionally linked land;
    - Mitigation measures; and

- In-combination effects.

2.4.3 Further details of these matters are provided in Sections 3 and 4 of this RIES.

## 3 LIKELY SIGNIFICANT EFFECTS

### 3.1 Assessment approach

- 3.1.1 The Applicant's full approach to screening for likely significant effects is described within Section 2 of the HRA report [REP6-006], with screening matrices presented in Appendix 1 [REP6-007] (linked at Annex 3 to this report).
- 3.1.2 As described in Section 2 of the RIES above, the following ten European Sites and their qualifying features were identified within 15km of the Proposed Development and were considered for likely significant effects:
- Lower Derwent Valley SAC;
  - Lower Derwent Valley SPA;
  - Lower Derwent Valley Ramsar;
  - River Derwent SAC;
  - Humber Estuary SAC;
  - Humber Estuary SPA;
  - Humber Estuary Ramsar site;
  - Skipwith Common SAC;
  - Thorne and Hatfield Moors SPA; and
  - Thorne Moor SAC.
- 3.1.3 Having identified the above European sites within the Zol and assessed their qualifying features and had regard to their Conservation Objectives, the HRA report [REP6-006] discounted a number of potential impacts (for example, direct physical impacts within the boundary of European Sites). These are presented in the HRA screening matrices [REP6-007].
- 3.1.4 The HRA report [REP6-006] identified the following impacts with the potential to result in likely significant effects:
- Impacts resulting in disturbance to qualifying features (specifically otters and fish species) using functionally-linked habitat (light/noise/vibration/visual);
  - Impacts resulting in hydrological changes to functionally-linked habitat (quality/flow) and effects on species using functionally linked land (specifically otter and fish species);
  - Impacts resulting in changes to air quality; and
  - In-combination effects.
- 3.1.5 It was determined that all ten European Sites identified required further consideration through Stage 2 of the HRA process, to establish if adverse effects on the integrity of these sites from the Proposed Development could be ruled out [REP6-006]. See Annex 2 to this report for a summary of the European sites and qualifying features.

- 3.1.6 NE's Statement of Common Ground (SoCG) [REP1-004] confirms agreement between the Applicant and NE that no other European Sites beyond the ten sites listed are relevant to the HRA for the Proposed Development. See Section 3.2 for discussion of qualifying features.
- 3.1.7 The draft SoCG between the Applicant and North Yorkshire County Council and Selby District Council [REP4-008, since updated by REP7-008] confirmed that the Parties agree that NE is the statutory nature conservation organisation which will be consulted in relation to Habitats Regulations Assessment matters relating to the Proposed Development, pursuant to the Habitats Regulations.

## 3.2 HRA matters considered during the Examination

- 3.2.1 This section of the RIES provides a summary of the HRA screening matters considered during the Examination up to and including Deadline 7 (20 February 2019).

### **Qualifying features**

- 3.2.2 In Written Question [BH 1.18, PD-006], the ExA raised the following matters relating to the qualifying features listed in the Applicant's original HRA report and screening and integrity matrices [APP-134]. These included several noted discrepancies between the features identified in Tables 2-1 to 2-9 of the HRA report [APP-134] and those presented in the matrices. The Lower Derwent Ramsar was missing from the summary tables; river lamprey was missing as a qualifying feature for the River Derwent SAC in Table 2-3; and other qualifying features were missing from the Applicant's matrices.
- 3.2.3 In their response to the ExA's Written Questions [REP2-045], NE also noted that the site features listed in HRA Screening Matrix 4 (Lower Derwent Valley SPA) in Appendix 1 of the HRA report [APP-134] appeared to be erroneous.
- 3.2.4 In response to the ExA's question and representations made by IPs during the Examination, the Applicant provided revised HRA screening and integrity matrices at Deadline 2 (see BHR 1.18 - Appendix C to the Applicant's Responses to Written Questions [REP2-035]) and an updated HRA report was subsequently provided at Deadline 3 (22 November 2018) [REP3-017]. The Applicant confirmed in their response to questions [REP2-035] that the conclusions in the HRA report are not affected by the amendments to the tables and matrices. The Applicant stated that:

*"The corrections to Tables 2-1 to 2-10 and the revised matrices do not introduce any new impact pathways by which the qualifying interests could be affected. The additional qualifying interests are not considered to be any more susceptible to the impacts arising from the Proposed Scheme than those previously identified. The previously reported conclusions regarding potential for LSE and adverse effects on the integrity of European Sites are not altered by these amendments; no adverse effects on the integrity of any European Sites are predicted to occur."* [REP2-035]

- 3.2.5 NE confirmed in their response to the ExA's Written Questions [REP2-045] that they were in receipt of an updated HRA report in which river lamprey has been correctly added to Table 2.3 (River Derwent SAC) and that correct qualifying features have been identified for the European Sites identified in Tables 2.1 to 2.8.
- 3.2.6 There have been no concerns raised by other relevant IPs in relation to the European Sites and qualifying features considered by the Applicant in its HRA report [REP6-006].

### 3.3 Summary of HRA screening outcome during the Examination

- 3.3.1 The conclusion of potential likely significant effects on the ten European sites and specific qualifying features, as identified in the screening matrices and in Annex 2 to this report, was **not disputed** by any IPs during the Examination.
- 3.3.2 The Applicant's conclusion of no likely significant effects on all other qualifying features of the ten European sites considered by the Applicant in its HRA report [REP6-006, replacing APP-134], and as presented in its screening matrices [REP6-007, replacing APP-134 and REP2-035], was also **not disputed** by any IPs during the Examination (see Annex 2 to the RIES).
- 3.3.3 The European sites carried forward to consideration of adverse effects on site integrity are summarised in Section 4 of this report.

## 4 ADVERSE EFFECTS ON INTEGRITY

### 4.1 Conservation objectives

- 4.1.1 The Applicant provided the conservation objectives for the European sites in Tables 2-1 to 2-10 of the HRA report [REP6-006].

### 4.2 The integrity test

#### **No adverse effects on site integrity**

- 4.2.1 The Applicant [REP6-006] concluded that the Proposed Development **would not** adversely affect the integrity of the European sites and features summarised in Table 4.1 below. Evidence for the conclusions reached on integrity are detailed within Sections 5 and 6 of the HRA report [REP6-006], together with the footnotes of the updated HRA integrity matrices submitted for Deadline 6 [REP6-008].
- 4.2.2 NE confirmed at an early stage of the Examination that they considered that the Applicant has submitted a thorough ES which they are:
- "satisfied [that the ES] demonstrates beyond reasonable scientific doubt that there would be no significant effect on the integrity of any European sites" and that NE "does not consider that the proposal is likely to have a significant impact on any nationally or internationally designated nature conservation sites or nationally designated landscapes, and that sufficient mitigation measures have been put in place to avoid significant impacts on protected species." [RR-212].*
- 4.2.3 There were however several matters that were discussed further during the Examination and are therefore discussed at Section 4.3 below.

**Table 4.1 European sites considered for adverse effects on site integrity**

<b>Name of European site</b>	<b>Qualifying feature</b>
Lower Derwent Valley SAC	6510 Lowland hay meadows
	91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>
	1355 Otter
Lower Derwent Valley SPA	A037 Bewick's Swan (non-breeding)
	A050 Eurasian wigeon (non-breeding)
	A052 Eurasian teal (non-breeding)
	A056 Northern shoveler (breeding)
	A140 European golden plover (non-breeding)
	A151 Ruff (non-breeding)
	Waterbird Assemblage
Lower Derwent Valley Ramsar	Criterion 1: the river and flood meadows
	Criterion 2: rich assemblage of wetland invertebrates
	Criterion 3: staging post for passage birds
	Criterion 4: regularly supports 20,000 or more waterbirds
	Criterion 5: regularly supports 1% of the individuals in a population of the following species or subspecies of waterbird: Eurasian wigeon and Eurasian teal
River Derwent SAC	3260 Water courses of plain montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation
	1355 Otter
	1099 River lamprey
	1095 Sea Lamprey



Name of European site	Qualifying feature
	1163 Bullhead
Humber Estuary SAC	1130 Estuaries
	1140 Mudflats and sandflats not covered by seawater at low tide
	1110 Sandbanks which are slightly covered by sea water all the time
	1150 Coastal lagoons * Priority feature
	1310 Salicornia and other annuals colonizing mud and sand
	1330 Atlantic salt meadows
	2110 Embryonic shifting dunes
	2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")
	2130 Fixed coastal dunes with herbaceous vegetation ("grey dunes") * Priority feature
	2160 Dunes with <i>Hippopha rhamnoides</i>
	1364 Grey Seal
	1095 Sea Lamprey
1099 River Lamprey	
Humber Estuary SPA	A021 Great bittern (Non-breeding)
	A021 Great bittern (Breeding)
	A048 Common shelduck (Non-breeding)
	A081 Eurasian marsh harrier (Breeding)
	A082 Hen harrier (Non-breeding)
	A132 Pied avocet (Non-breeding)
	A132 Pied avocet (Breeding)

Name of European site	Qualifying feature
	A140 European golden plover (Non-breeding)
	A143 Red knot (Non-breeding)
	A149 Dunlin (Non-breeding)
	A151 Ruff (Non-breeding)
	A052 Eurasian teal
	A050 Eurasian wigeon
	A053 Mallard
	A169 Turnstone
	A059 Common pochard
	A062 Greater scaup
	A675 Brent goose
	A067 Common goldeneye
	A144 Sanderling
	A137 Common ringed plover
	A160 Eurasian curlew
	A158 Whimbrel
	A164 Greenshank
	A142 Lapwing
	A156 Black-tailed godwit (Non-breeding)
	A157 Bar-tailed godwit (Non-breeding)
	A162 Common redshank (Non-breeding)

Name of European site	Qualifying feature
	A195 Little tern (Breeding)
	A130 Eurasian oystercatcher (wintering)
	A141 Grey plover
	Waterbird assemblage
Humber Estuary Ramsar Site	Criterion 1: Dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons
	Criterion 3: Breeding colony of grey seals
	Criterion 5: Assemblages of international importance: 153,934 waterfowl (Non-breeding season)
	Criterion 6: Species/populations occurring at levels of international importance: Eurasian golden plover; Red knot; Dunlin; Alpine; Black-tailed godwit; Common redshank; Common shelduck; Bar-tailed godwit
	Criterion 8: Migration route for both river lamprey and sea lamprey between coastal waters and their spawning areas.
Skipwith Common SAC	4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> ; Wet heathland with cross-leaved heath
	4030 European dry heaths
Thorne and Hatfield Moor SPA	A224 European nightjar (Breeding)
Thorne Moor SAC	Annex I Habitat 7120: Degraded raised bogs still capable of natural regeneration

## 4.3 HRA matters considered during the Examination

- 4.3.1 The following matters relating to the Applicant's assessment of effects on site integrity were discussed during the Examination.

### **Air Quality Changes**

- 4.3.2 The Applicant's approach to assessing air quality effects, including Air Dispersion Modelling and the Stack Height Sensitivity approach, are presented in ES Chapter 6: Air Quality and Appendix 6.3 of the ES [APP-074 and APP-100]. The Examination focused on the following key matters relating to air quality.

#### ***i) Stack height***

- 4.3.3 As set out in the dDCO [REP7-003 and REP7-004] and in the Applicant's revised ES Chapter 3: Site and Project Description submitted at Deadline 6 [REP6-003], the Proposed Development includes a maximum of eight main stacks (up to four stacks for Unit X and up to four for Unit Y). The height of these stacks and the implications for the Applicant's HRA were matters discussed during the Examination.
- 4.3.4 The dispersion modelling presented in ES Chapter 6: Air Quality [APP-074] and ES Appendix 6.3 [APP-100] was undertaken with the stack heights for Units X and Y set at 120m. This assessment also stated that the recommended 'minimum' stack height is 120m and that stack heights of greater than 120m are not structurally possible with the proposed vertical Heat Recovery System Generators (HRSGs) [APP-100].
- 4.3.5 In First Written Question [AQ 1.11, PD-006], the ExA noted that Schedule 13 of the Applicant's dDCO [APP-020 and AS-012] identified the stack height to be a 'maximum' of 120m Above Ground Level (AGL) and thus implied the stack could be constructed at a height less than 120 AGL. The ExA requested the Applicant to confirm if the recommendation of 120m as stated in APP-100 is 120 AGL or Above Ordnance Datum (AOD) [AQ 1.11, PD-006]. Given that the HRA report relies upon the ES air quality assessment and modelling, the Applicant was also requested to confirm whether the conclusion of the HRA would be affected if the stack height was constructed lower than 120m AGL [AQ 1.11, PD-006].
- 4.3.6 In their response at Deadline 2 [3.1.49, REP2-035], the Applicant confirmed that the stack height modelled was at a height of 120m AGL, with the cooling towers modelled at 114m AGL. The Applicant confirmed that in order for the conclusions generated within the HRA report to remain robust, the stack height (for Units X and Y) would have to be fixed at a height not less than 120m (AGL) [3.1.50, REP2-035].
- 4.3.7 In their non-material change request [REP3-001] submitted at Deadline 3, the Applicant proposed to change some of the maximum parameters included in Schedule 13 of the dDCO, and a revised dDCO was submitted [REP3-007, REP3-008]. In addition to the proposed changes to parameters, the Applicant added additional tables (Tables 14 and 16) to Schedule 13 of the revised dDCO [REP3-007, REP3-008] to allow for minimum parameters for the stacks, as requested by the ExA in the

Written Question. This is identified in the Applicant's Schedule of Changes at Deadline 3 [REP3-020].

- 4.3.8 The Applicant stated that the proposed changes to stack height were due to the stack height of the existing cooling towers being confirmed as 116.5m rather than 114m AGL. To confirm that these changes did not affect the assessment of air quality impact as reported in the ES, the Applicant stated [REP3-022] that they had rerun the air dispersion model to incorporate the latest information on structure dimensions and proposed stack heights, whilst maintaining the minimum height differential between cooling towers and Unit X and Y stacks of 6m. The revised modelling was based on the following height parameters:
- Unit X and Unit Y Stack Height 122.5m (AGL); and
  - Cooling Tower Height 116.5m (AGL).
- 4.3.9 The Air Quality modelling data output was not provided by the Applicant at Deadline 3, and in response to a procedural decision issued by the ExA on 21 December 2018 [PD-012], the Applicant provided an Air Quality Technical Note [REP5-019] at Deadline 5. The technical note presented the rerun air quality modelling alongside the original modelling from the ES. The note stated that:
- "the results show that, taken across all meteorological years, the slight increase in stack height results in a marginal reduction in the impacts of the repowered units but this has no significant impact on the conclusions of the assessment and does not change the significance of effects reached in the assessment."*
- 4.3.10 Subsequent to the submission of the technical note, the ExA identified in Further Written Question [BHR 2.3, PD-014] that the project description in the updated HRA report submitted at Deadline 3 [REP3-017] included reference to the amended stack height parameters at paragraph 1.2.16. However, the air quality modelling data presented in Section 6 of the HRA Report, which is necessary for the purposes of the assessment, was not updated and continued to reference modelling data presented in ES Chapter 6 Air Quality [APP-074]. The Applicant was therefore requested to provide a revised HRA Report or an addendum to the HRA Report to reflect the description of the Proposed Development in light of the non-material change request submitted at Deadline 3 and to include the re-run air quality data and modelling [BHR 2.3, PD-014].
- 4.3.11 A further updated HRA report was submitted by the Applicant at Deadline 6 [REP6-006] in response to the ExA's Further Written Questions. The Applicant's Schedule of Change [REP6-010] summarises the amendments. The Applicant's technical note [REP5-019] confirmed that the updated air quality modelling demonstrates that the change in stack height has a negligible effect on air quality. The updated HRA report [REP6-006] concludes as in previous versions that the Proposed Development would not have an adverse effect on the integrity of any of the European sites assessed.

**ii) Mitigation Measures, including Selective Catalytic Reduction (SCR) and the Ammonia Cap**

- 4.3.12 The ExA queried in Written and Further Written Questions the likely timing and choice of abatement methodology, together with the Environmental Permit (EP) and the delivery of Best Available Techniques (BAT) [PD-006 and PD-014].
- 4.3.13 The Applicant's HRA report [APP-134, replaced by REP6-006] considers the use of both secondary abatement (namely Selective Catalytic Reduction (SCR)) and primary abatement (namely operation controls) as mitigation measures to reduce NO<sub>x</sub> emissions from the Proposed Development. This is also described in Section 3.2 of ES Chapter 3: Site and Project Description [APP-071, as replaced by REP6-003], which indicates that the dDCO seeks flexibility for the Proposed Development to operate with either option. The Applicant confirmed that an EP variation application under the Environmental Permitting Regulations (EPR) was duly made on 16 July 2018 [REP2-020].
- 4.3.14 At Deadline 2 of the Examination, it was pointed out by the EA [REP2-042] in their response to the ExA' Written Questions [PD-006] that the Applicant had not included secondary abatement with their EP application for the Proposed Development. The Applicant acknowledged that this was the case but also confirmed that they had presented and discussed the proposed monitoring approach with the EA in a meeting held on 25 October 2018 and that furthermore, they have assessed scenarios both with and without SCR in the ES and demonstrated that the Proposed Development is capable of being adequately regulated under the EPR, either with or without SCR [REP3-025].
- 4.3.15 The EA [REP2-042] also confirmed in their response to questioning by the ExA [AQ 1.2, PD-006] that they are:
- "of the opinion that a project of this type and nature should be capable of being adequately regulated under the Environmental Permitting Regulations (EPR) and at this point the Environment Agency knows of no obvious errors or issues which would prevent a permit being granted at this time. However, as the permit application has not yet been fully assessed it would be premature to provide comments on whether or not a permit would be issued at this stage."*
- 4.3.16 At Deadline 4 of the Examination, it was highlighted that in December 2018 DEFRA made the decision that the BReF Achievable Emission Level (AEL) document for new large combustion plant would apply to high efficiency CCGT generating stations (such as the Proposed Development) [EV-010 to EV-013; REP4-012 and REP6-013]. The Applicant confirmed that they had anticipated this potential outcome by including SCR as a means of reducing NO<sub>x</sub> in its DCO application and in its ES and HRA [REP6-013].
- 4.3.17 Following DEFRA's announcement, the Applicant has confirmed their intention to submit a variation to the EP application that would accommodate both primary and secondary abatement options [REP6-013]. The Applicant intends to submit this in February/March 2019 [REP7-

015]. Once issued, emissions from either compliance route would be regulated by the EA through the EP.

- 4.3.18 The Applicant has currently submitted two draft SoCGs with the EA to the Examination [REP4-006 and REP7-009]. These have not yet been signed by the EA to confirm agreement, although the Applicant states that they have been in discussion with the EA and that they consider there are no further points that remain unanswered. The Applicant intends to submit a final SoCG with the EA to the Examination at Deadline 8 (21 March 2019).
- 4.3.19 The draft SoCG [REP7-009] states that to guarantee achieving Best Available Techniques Reference (BReF) levels, the use of secondary abatement technology, being SCR, may be required. This would achieve the reduction of NO<sub>x</sub> emissions by introducing ammonia as a catalyst. However, there would be a small release of ammonia from the emissions stack, called the "ammonia slip".
- 4.3.20 As part of the EA's determination of the EP application, an assessment of BAT will be undertaken for the Proposed Development. An EP application will only be successful if it demonstrates that the Proposed Development will incorporate BAT (for reducing emissions as defined in and prescribed under the relevant EU Directives). It is agreed that a technique cannot constitute BAT if it leads to unacceptable effects on an environmental receptor, including an adverse effect on the integrity of a European site. The EA, via the EP application and determination process, will conclude whether the use of SCR constitutes BAT in respect of the Proposed Development [REP7-009; REP6-013].
- 4.3.21 Therefore, the EP application and the dDCO allow for the Proposed Development to operate either with or without abatement in the form of SCR. Accordingly, the impacts associated with either outcome, to be determined by the EA, have been assessed within the Applicant's ES and the HRA [REP6-013 and REP7-015].
- 4.3.22 In respect of air quality and the proposed mitigation measures, NE confirmed in their signed SoCG [para 3.10.8, REP1-004] that the following has been agreed:
- "With the implementation of either one of the avoidance and mitigation measures as set out generally in section 3.2, and specifically between paragraphs 6.3.24 and 6.3.26 of the HRA Report (Examination Library Reference APP-134) (being combustion control or use of SCR with an annualised ammonia budget), which are included as part of the Proposed Development, and which will be assessed further (in terms of likely emissions) via the Environmental Permitting process for the Proposed Scheme under The Environmental Permitting (England and Wales) Regulations 2016, there would be no adverse effects on the integrity of any European Site resulting from air quality impacts, as set out in Section 6.3 of the HRA Report (Examination Library Reference APP-134)".*
- 4.3.23 The ExA notes that paragraphs 6.3.24 to 6.3.26 of the HRA report [APP-134] do not contain the information on and the proposed mitigation measures and believes the SoCG is intending to refer to paragraphs 6.3.20

to 6.3.22. These paragraphs are now 6.3.29 to 6.3.31 in the updated HRA report submitted at Deadline 6 [REP6-006].

***Conclusion: Air Quality Effects***

4.3.24 It is agreed in the SoCG between the Applicant and NE [3.6.10, REP1-004] that no further direct mitigation of air emissions is necessary beyond setting an appropriate stack height and either:

- The inclusion of NO<sub>x</sub> emissions control by combustion control; or
- The inclusion of NO<sub>x</sub> and ammonia emissions control by the use of SCR with an annualised ammonia emissions budget.

4.3.25 In the SoCG with the EA [3.2.1, REP4-007], it is agreed that operational emissions from the Proposed Development would be further controlled through the Environmental Permitting regime that is administered by the EA.

**Habitat disturbance and hydrological changes - Otters and fish**

4.3.26 Otters and fish (specifically river lamprey and sea lamprey) were identified as qualifying features with the potential to be impacted, by the Proposed Development as a result of habitat disturbance (light/ noise/ vibration/ visual) whilst they are using functionally linked habitat, and also by hydrological changes (quality/ flow) to European site habitats and functionally linked habitat [REP6-006]. The Examination focused on the following key matters.

***i) Mitigation measures***

4.3.27 In the Written Questions [BHR 1.2, PD-006], the ExA requested the Applicant expand on the potential impacts to protected species (including otter) should trenchless crossings of relevant watercourses not be possible and to provide further details regarding mitigation measures to be employed. In their response at Deadline 2 [REP2-035], the Applicant confirmed that measures would be imposed to minimise impacts on affected species if trenchless techniques could not be used. Various mitigation measures to minimise adverse impacts on affected species are set out in ES Chapter 9 [APP-077] and paragraphs 4.1.9 to 4.1.17 of the Applicant's Responses to the ExA's Written Questions [REP2-035].

4.3.28 In NE's response to the ExA's Written Questions [REP2-045], NE confirm that they are satisfied that should trenchless techniques not be used, appropriate mitigation measures could be imposed to mitigate any impacts on otter (or water vole), as detailed in Sections 9.8.23 and 9.8.31 of Chapter 9: Biodiversity the ES [APP-077].

4.3.29 In their Written Questions [BHR 1.19, PD-006], the ExA requested the Applicant to explain why the avoidance and mitigation measures as set out in paragraph 5.3.16 of the HRA report [APP-134] were not included in full within the Outline Landscape and Biodiversity Strategy (LBS) [APP-135]. The Applicant was also asked to confirm that measures to control effects on fish species form part of the CEMP [APP-133], or if not, to provide further detail.



- 4.3.30 At Deadline 2, the Applicant made additions to the Outline LBS [REP2-026] in respect of otter and fish mitigation following the ExA's questioning (BHR 1.19 [PD-006]). However, it was noted by the ExA in their Further Written Questions (BHR 2.4 [PD-014]) that additions made to the updated CEMP [REP4-005] in respect of otters and fish species appeared to be minimal and did not contain the same certainty as those included in the HRA Report [REP3-017] and Outline LBS [REP2-026].
- 4.3.31 In response to Question BHR 2.4 of [PD-014], an updated version of the outline CEMP [REP6-005] was provided as part of the Applicant's Deadline 6 submission with revisions to the wording to match that used in the Outline LBS [REP6-009] and HRA report [REP6-006], making it clear that the necessary mitigation measures would be carried out under the CEMP and are not optional activities.
- 4.3.32 The CEMP is secured by Requirement 17 of the dDCO [REP7-003, REP7-004] and must be substantially in accordance with the Outline CEMP. Requirement 8 of the dDCO secures written strategies for the landscape and biodiversity mitigation which are to be substantially in accordance with the Outline LBS and Chapter 9 (biodiversity) of the ES. The surface water drainage strategy is also secured by Requirement 13 of the dDCO [REP7-003, REP7-004].
- 4.3.33 NE confirmed at Deadline 6 [REP6-023] that they are *"satisfied with the approach to otter and fish mitigation across the Outline CEMP, Outline LBS and HRA and is broadly satisfied with the revisions made to the Outline CEMP in this regard. Our only minor comment is to be clear with regards to paragraph 3.4.6 that pre-construction surveys must be carried out before site clearance is undertaken unless there are sound ecological reasons why they are not necessary. We therefore recommend removing the word "ideally" from the last sentence of the paragraph."*
- 4.3.34 At Deadline 6, the Applicant submitted an updated version of the CEMP [REP6-005] which omits "ideally" from paragraph 3.4.6.

**ii) In-combination effects**

- 4.3.35 Paragraphs 5.3.21 and 5.3.22 of the updated HRA report submitted at Deadline 3 [REP3-017] stated that there may be some insignificant residual effects on the otter feature of the European sites. In the ExA's Further Written Question [BHR 2.5, PD-014], the Applicant was asked to confirm how the Secretary of State (SoS) could be confident that these effects would not interact with the effects of other plans or projects to lead to significant in-combination effects. The Applicant was also asked to comment on whether any insignificant residual effects on the fish features were anticipated.
- 4.3.36 In their response to the ExA's questioning [4.1.14 to 4.1.19, REP6-013], the Applicant confirmed that they do not consider that any minor disturbance effects on the local otter population could combine appreciably with those of other plans or projects. Likewise, the Applicant concludes that any residual effects on fish qualifying interests would be so minimal as to be imperceptible (as set out in ES Chapter 9: Biodiversity [APP-077]).
- 4.3.37 The Applicant therefore considers that the impacts of the Proposed Development on otter and fish populations could not combine appreciably

with those of other plans or projects and as such, there is no prospect of significant in-combination effects [4.1.14 to 4.1.19, REP6-013].

***Conclusion: Habitat disturbance and hydrological changes***

- 4.3.38 NE confirmed that they are satisfied with the Applicant's approach to otter and fish mitigation across the Outline CEMP, OLBS and HRA and is broadly satisfied with the revisions made to the Outline CEMP in this regard [REP6-023].
- 4.3.39 NE also confirmed in their SoCG that they agree "with the implementation of avoidance and mitigation measures as set out in section 3.2, and sections 5.3.16 to 5.3.21 of the HRA Report (Examination Library Reference APP134), between paragraphs 4.4.1 to 4.4.5 of the Construction Environment Management Plan (CEMP) (Examination Library Reference APP-133) (the surface water drainage scheme is to be secured by Requirements 13 and the CEMP by Requirement 16 (now Requirement 17 in the current dDCO [REP7-003]) in the draft DCO (Examination Library Reference AS-012)), and the outline Landscape and Biodiversity Strategy (secured by Requirement 8 of the draft DCO), there would be no adverse effects on the integrity of any European Site resulting from likely significant effects (disturbance and hydrological impacts) on functionally linked habitats, as set out in Section 5.3.23 of the HRA Report (Examination Library Reference APP-134)."

## 4.4 Summary

- 4.4.1 The ExA has produced this RIES to outline the latest position in respect of HRA matters during the Examination.
- 4.4.2 The Applicant concludes that there would be **no adverse effects** on the integrity of any European site or their qualifying features resulting from air quality changes or impacts (disturbance and hydrological impacts) to features and habitats functionally linked to the European sites [REP6-006].
- 4.4.3 Evidence for the conclusions reached on integrity are detailed within the footnotes to the matrices in the HRA report [REP6-006] and Appendix 2 [REP6-008]. The European sites and features are summarised in Annex 2 to this report and links to the Applicant's HRA screening and integrity matrices are provided in Annex 3.
- 4.4.4 Agreement that the Proposed Development would not have an adverse effect on the integrity of any of the European Sites assessed was recorded between the Applicant and NE in the relevant SoCG [REP1-004] and NE confirmed that they do not have concerns with regards to HRA matters in their RR [RR-212].
- 4.4.5 The Applicant's conclusions in relation to European sites and their qualifying features were **not disputed** by any Interested Parties during the Examination.

## ANNEX 1: DOCUMENTS USED TO INFORM THE RIES

Exam Library Reference	Document
<b><u>Application Documents</u></b>	
APP-020	Draft Development Consent (dDCO)
APP-071	Environmental Statement (ES) Chapter 3 Site and Project Description
APP-074	ES Chapter 6 Air Quality
APP-075	ES Chapter 7 Noise and Vibration
APP-077	ES Chapter 9 Biodiversity
APP-085	ES Chapter 17 Cumulative Assessment
APP-100	ES Appendix 6.3 Air Dispersion Modelling
APP-103	ES Appendix 7.3 Construction Noise Calculations - Ecology NSR
APP-108	ES Appendix 9.2 Biodiversity Designated Sites
APP-113	ES Appendix 9.7 Wintering Bird Survey
APP-115	ES Appendix 9.9 Otter and Water Vole Survey
APP-133	Outline Construction Environmental Management Plan (CEMP)
APP-134	Habitats Regulations Assessment (HRA) Report
APP-135	Outline Landscape and Biodiversity Strategy (LBS)
<b><u>Post-submission updates</u></b>	
AS-015	Habitats Regulations Assessment Report Appendix 3 - SSSI Condition Assessments
AS-012	Applicant's dDCO
<b><u>Relevant Representations</u></b>	
RR-212	Natural England
RR-292	Environment Agency
RR-315	Selby District Council
<b><u>Statements of Common Ground</u></b>	
REP1-004	Statement of Common Ground (SoCG) with Natural England Rev 001
REP4-007	Draft SoCG with Environment Agency
REP4-008	Draft SoCG with North Yorkshire County Council and Selby County Council
REP7-008	Draft SoCG with North Yorkshire County Council and Selby District Council D7
REP7-009	Draft SoCG with the Environment Agency (second draft)

<b><u>Hearing Documents</u></b>	
EV-010	Recording of Issue Specific Hearing 1 (ISH1) - AM Session Part 1 - 05 December 2018
EV-011	Recording of Issue Specific Hearing 1 (ISH1) - AM Session Part 2 - 05 December 2018
EV-012	Recording of Issue Specific Hearing 1 (ISH1) – PM Session Part 1 - 05 December 2018
EV-013	Recording of Issue Specific Hearing 1 (ISH1) – PM Session Part 2 - 05 December 2018
EV-020	Recording of Issue Specific Hearing 3 (ISH3) - Session 1 - 12 February 2019
EV-021	Recording of Issue Specific Hearing 3 (ISH3) - Session 2 - 12 February 2019
<b><u>Procedural Decisions</u></b>	
PD-006	Examining Authority's (ExA) Written Questions
PD-012	Request for Further Information on the Proposed Changes to the Application (Rule 17)
PD-014	ExA's Further Written Questions
<b><u>Deadline 1 (18 October 2018)</u></b>	
REP1-010	Applicant's Supplemental Environmental Information - Breeding Bird Survey Rev 001
REP1-013	Applicant's Responses to Relevant Representations Rev 001
<b><u>Deadline 2 (8 November 2018)</u></b>	
REP2-014	Applicant's dDCO
REP2-020	Applicant's updated Other Consents and Licences
REP2-024	Applicant's ES Commitments Register
REP2-025	Applicant's Outline CEMP
REP2-026	Applicant's Outline LBS
REP2-035	Applicant's Responses to ExA's Written Questions
REP2-037	Applicant's Removal of Stage 0 Mitigation Review
REP2-042	Environment Agency's answer to the ExA's Written Questions
REP2-045	Natural England's Response to the ExA's Written Questions
REP2-047	North Yorkshire County Council & Selby District Council's Response to the ExA's Written Questions and Local Impact Report (LIR)
<b><u>Deadline 3 (22 November 2018)</u></b>	
REP3-007	Applicant's dDCO
REP3-017	Applicant's updated HRA Report
REP3-020	Applicant's Schedule of Changes
REP3-022	Applicant's Assessment of Non-Material Amendments to Proposed Development

Report on the Implications for European Sites for  
Drax Re-Power

REP3-024	Applicant's Responses to Written Representations
REP3-025	Applicant's Responses to Other Parties' Responses to the ExA's Written Questions
REP3-026	Applicant's Response to the LIR
<b><u>Deadline 4 (13 December 2018)</u></b>	
REP4-005	Applicant's Outline CEMP
REP4-012	Written Summary of Applicants Oral Case at Issue Specific Hearing (Environmental Matters)
<b><u>Deadline 5 (9 January 2019)</u></b>	
REP5-010	Applicant's dDCO
REP5-019	Air Quality Technical Note in Relation to Changes in Stack Height
<b><u>Deadline 6 (30 January 2019)</u></b>	
REP6-003	Applicant's revised ES Chapter 3: Site and Project Description
REP6-005	Applicant's Outline CEMP
REP6-006	Updated HRA report
REP6-007	Updated HRA report Appendix 1: Screening Matrices
REP6-008	Updated HRA report Appendix 2: Integrity Matrices
REP6-009	Applicant's Outline LBS
REP6-013	Applicant's Responses to ExA's Further Written Questions
<b><u>Deadline 7 (20 February 2019)</u></b>	
REP7-001	Applicant's Cover Letter
REP7-003	Applicant's dDCO
REP7-007	Applicant's Outline LBS
REP7-015	Written Summary of the Applicant's Oral Case put at the Issue Specific Hearing - 12 February 2019

## ANNEX 2: EUROPEAN SITES AND FEATURES CONSIDERED

**Table 2.1: UK European sites and qualifying interest features identified by the Applicant. All sites and features were screened into the HRA and considered during the Examination.**

Name of European Site	Qualifying Interest Feature	Potential for likely significant effects?	Potential adverse effect on integrity?	Agreed with NE and other relevant parties?
Lower Derwent Valley SAC	Annex 1 Habitat 6510: Lowland hay meadows	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex 1 Habitat 91E0: Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex II Species 1355: Otter	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
Lower Derwent Valley SPA <sup>5</sup>	A037 Bewick's swan (non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A050 Eurasian wigeon (non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

<sup>5</sup> HRA Screening Matrix 4: Lower Derwent Valley SPA at Appendix A referred to breeding corncrake and spotted crane as qualifying features; however, summary Table 2-2 of the HRA Report [APP-134] only referred to breeding shoveler.

<b>Name of European Site</b>	<b>Qualifying Interest Feature</b>	<b>Potential for likely significant effects?</b>	<b>Potential adverse effect on integrity?</b>	<b>Agreed with NE and other relevant parties?</b>
	A052 Eurasian teal (non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A056 Northern shoveler (breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A140 European golden plover (non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A151 Ruff (non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Waterbird Assemblage	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
Lower Derwent Valley Ramsar <sup>6</sup>	Criterion 1: the river and flood meadows	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Criterion 2: rich assemblage of wetland invertebrates	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Criterion 3: staging post for passage birds	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

<sup>6</sup> The Lower Derwent Valley Ramsar was originally missing from the Applicants summary tables [APP-134].

Name of European Site	Qualifying Interest Feature	Potential for likely significant effects?	Potential adverse effect on integrity?	Agreed with NE and other relevant parties?
	Criterion 4: regularly supports 20,000 or more waterbirds	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Criterion 5: regularly supports 1% of the individuals in a population of the following species or subspecies of waterbird: Eurasian wigeon and Eurasian teal	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
River Derwent SAC <sup>7</sup>	Annex I Habitat 3260: Water courses of plain montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex II Species 1355: Otter	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex II Species 1099: River lamprey	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex II Species 1095: Sea lamprey	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex II Species 1163: Bullhead	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

<sup>7</sup> River lamprey was missing as a qualifying feature for the River Derwent in the Applicants HRA report [APP-134] but was included in the screening matrix at Appendix 1 [APP-134].



Name of European Site	Qualifying Interest Feature	Potential for likely significant effects?	Potential adverse effect on integrity?	Agreed with NE and other relevant parties?
Humber Estuary SAC <sup>8</sup>	Annex I Habitat 1130: Estuaries	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex I Habitat 1140: Mudflats and sandflats not covered by seawater at low tide	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex I Habitat 1110: Sandbanks which are slightly covered by sea water all the time	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex I Habitat 1150: Coastal lagoons * Priority feature	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex I Habitat 1310: Salicornia and other annuals colonizing mud and sand	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex I Habitat 1330: Atlantic salt meadows	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex I Habitat 2110: Embryonic shifting dunes	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex I Habitat 2120: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes")	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

<sup>8</sup> The Applicants HRA Report [APP-134] had not identified the same qualifying features for the Humber Estuary SPA as the Natura 2000 Standard Data form.

Name of European Site	Qualifying Interest Feature	Potential for likely significant effects?	Potential adverse effect on integrity?	Agreed with NE and other relevant parties?
	Annex I Habitat 2130: "Fixed coastal dunes with herbaceous vegetation ("grey dunes") * Priority feature	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex I Habitat 2160: Dunes with <i>Hippopha rhamnoides</i>	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex II Species 1364: Grey seal	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex II Species 1095: Sea lamprey	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex II Species 1099: River lamprey	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
Humber Estuary SPA	A021 Great bittern (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A021 Great bittern (Breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A048 Common shelduck (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

Name of European Site	Qualifying Interest Feature	Potential for likely significant effects?	Potential adverse effect on integrity?	Agreed with NE and other relevant parties?
	A081 Eurasian marsh harrier (Breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A082 Hen harrier (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A132 Pied avocet (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A132 Pied avocet (Breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A140 European golden plover (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A143 Red knot (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A149 Dunlin (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A151 Ruff (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

Name of European Site	Qualifying Interest Feature	Potential for likely significant effects?	Potential adverse effect on integrity?	Agreed with NE and other relevant parties?
	A052 Eurasian teal	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A050 Eurasian wigeon	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A053 Mallard	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A169 Turnstone	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A059 Common pochard	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A062 Greater scaup	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A675 Brent goose	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A067 Common goldeneye	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

Name of European Site	Qualifying Interest Feature	Potential for likely significant effects?	Potential adverse effect on integrity?	Agreed with NE and other relevant parties?
	A144 Sanderling	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A137 Common ringed plover	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A160 Eurasian curlew	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A158 Whimbrel	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A164 Greenshank	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A142 Lapwing	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A156 Black-tailed godwit (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A157 Bar-tailed godwit (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

Name of European Site	Qualifying Interest Feature	Potential for likely significant effects?	Potential adverse effect on integrity?	Agreed with NE and other relevant parties?
	A162 Common redshank (Non-breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A195 Little tern (Breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A130 Eurasian oystercatcher (Wintering)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	A141 Grey plover	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Waterbird assemblage	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
Humber Estuary Ramsar Site	Criterion 1: Dune systems and humid dune slacks, estuarine waters, intertidal mud and sand flats, saltmarshes, and coastal brackish/saline lagoons	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Criterion 3: Breeding colony of grey seals	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Criterion 5: Assemblages of international importance: 153,934 waterfowl (Non-breeding season)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

Name of European Site	Qualifying Interest Feature	Potential for likely significant effects?	Potential adverse effect on integrity?	Agreed with NE and other relevant parties?
	Criterion 6: Species/populations occurring at levels of international importance: Eurasian golden plover; Red knot; Dunlin; Alpine; Black-tailed godwit; Common redshank; Common shelduck; Bar-tailed godwit	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Criterion 8: Migration route for both river lamprey and sea lamprey between coastal waters and their spawning areas.	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
Skipwith Common SAC	Annex I Habitat 4010: Northern Atlantic wet heaths with <i>Erica tetralix</i> ; Wet heathland with cross-leaved heath	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
	Annex I Habitat 4030: European dry heaths	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
Thorne and Hatfield Moor SPA	A224 European nightjar (Breeding)	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]
Thorne Moor SAC	Annex I Habitat 7120: Degraded raised bogs still capable of natural regeneration	Yes [REP6-006 and REP6-007]	No [REP6-006 and REP6-008]	Yes [RR-212, REP1-004 and REP6-023]

## **ANNEX 3: HRA SCREENING AND INTEGRITY MATRICES**

Revised HRA Screening Matrices were provided by the Applicant for Deadline 6 (30 January 2019) [REP6-007] and are available at the following link:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010091/EN010091-001029-6.6%20Habitats%20Regulations%20Assessment%20Report%20Appendix%201%20D6.pdf>

The Applicant's Screening Matrices have not been amended by the ExA.

Revised HRA Integrity Matrices were provided by the Applicant for Deadline 6 (30 January 2019) [REP6-008] and are available at the following link:

<https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010091/EN010091-001016-6.6%20Habitats%20Regulations%20Assessment%20Report%20Appendix%202%20D6.pdf>

The Applicant's Integrity Matrices have not been amended by the ExA.