

REPORT on the IMPLICATIONS for EUROPEAN SITES Proposed River Humber Gas Pipeline Replacement Project

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



February 2016

CONTENTS

1.0 INTRODUCTION	1
Background	1
Documents used to inform this RIES.....	2
Structure of this RIES	2
2.0 OVERVIEW	3
European Sites Considered	3
Assessment methodology	3
HRA Matters Considered During the Examination	4
3.0 LIKELY SIGNIFICANT EFFECTS	5
Summary of the applicant’s HRA Screening exercise	5
Issues discussed during the examination relevant to the screening exercise	9
4.0 ADVERSE EFFECTS ON INTEGRITY	11
Conservation Objectives.....	11
Summary of the Applicant’s Integrity Test.....	11
Issues discussed during the examination relevant to the integrity test...	11
Conclusion	17

ANNEX 1 DOCUMENTS USED TO INFORM THE RIES

Report on the Implications for European Sites for
River Humber Gas Pipeline Replacement Project

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1.0 INTRODUCTION

Background

- 1.1 National Grid Gas (the applicant) has applied to the Secretary of State for a development consent order (DCO) under section 37 of the Planning Act 2008 (as amended) for the proposed River Humber Gas Pipeline Replacement Project (the proposed development). 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.
- 1.2 The relevant Secretary of State is the competent authority for the purposes of the Habitats Directive¹ and the Habitats Regulations² for applications submitted under the Planning Act 2008 regime (as amended). 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.
- 1.3 This Report on the Implications for European Sites (RIES) compiles, documents and signposts information provided within the DCO application, and the information submitted throughout the examination by both the applicant and interested parties, up to 1 February 2016 (which is the examination timetable date for the publication of this RIES) in relation to potential effects to European Sites³. It is not a standalone document and should be read in conjunction with the examination documents referred to in this report.
- 1.4 It is issued to ensure that interested parties including Natural England (NE) as the statutory nature conservation body are consulted formally on Habitats Regulations matters. This process may be relied on by the Secretary of State for the purposes of Regulation 61(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 is not revised following consultation.

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 2010 (as amended) (the Habitats Regulations).

³ The term European Sites in this context includes Special Areas of Conservation (SACs) and candidate SACs, Special Protection Areas (SPAs), potential SPAs, Sites of Community Importance (SCIs), 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 and the Habitats Regulations Assessment Handbook (DTA Publications July 2014).

- 1.5 The applicant has not identified any potential impacts on European Sites in other European Economic Area States. Only UK European Sites are addressed in this report.

Documents used to inform this RIES

- 1.6 The applicant provided a report entitled Habitats Regulations Assessment – Part 1 of 2 [**APP-027**] and Part 2 of 2 [**APP-028**] ('the HRA Report') with the DCO application. Screening and integrity matrices were provided in **APP-028**.
- 1.7 In response to a Rule 6 request by the ExA [**PD-004**], the applicant updated the matrices for Deadline 1 [**REP1-014**]. The applicant further updated the matrices for Deadline 4 [**REP4-021**] in response to an action point arising from day one of the Issue Specific Hearing on Construction and Environmental Impacts (held on 17 November 2015) [**EV-014**]. References within this RIES to the matrices are to the Deadline 4 version.
- 1.8 All other documents used to inform this RIES are listed in Annex 1 of this report.

Structure of this RIES

- 1.9 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 the date of the publication of the RIES on 1 February 2016; effectively up to Deadline 6b (29 January 2016) of the examination timetable. 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 (LSEs), either alone or in-combination with other projects and plans. The section also identifies where Interested Parties have disputed the applicant's conclusions 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 during the examination.
 - **Annex 1** contains a list of the documents used to inform this RIES.

2.0 OVERVIEW

European Sites Considered

- 2.1 The project is not connected with or necessary to the management for nature conservation of any of the European Sites considered within the applicant's assessment (paragraph 1.1.4 of **APP-027**).
- 2.2 The applicant's HRA Report [**APP-027**] notes that the proposed pipeline route crosses beneath the Humber Estuary, which is designated as a Special Area for Conservation (SAC), Special Protection Area (SPA) and Ramsar site; collectively these form the Humber Estuary European Marine Site. These are the European Sites considered by the applicant. The Statement of Common Ground (SoCG) between the applicant and NE states that NE agrees with the methodology adopted for the screening stage and the sites selected [**REP3-019**]. The qualifying features of these European Sites are detailed in Table 3.1 of this RIES.
- 2.3 The applicant's HRA Report states that no other European Sites are located within 20km of the proposed development (paragraph 4.2.2 of **APP-027**); a 20km study area was used as a search area relating to the extent over which potential impacts could feasibly occur.
- 2.4 No other European Sites or European Site features were identified as being potentially affected by the project by any interested parties in relevant representations or during the examination.

Assessment methodology

- 2.5 The applicant's HRA methodology is detailed in section 5.3 of the HRA Report [**APP-027**]. In order to inform their assessment, the applicant undertook a desk study; bird surveys (tidal counts, transect surveys, dusk and dawn vantage point counts); noise monitoring and modelling; and light modelling. The HRA Report [**APP-027**] confirms that the bird survey and noise monitoring methodologies were agreed with NE in the pre-application stage.
- 2.6 The applicant's assessment was undertaken on the basis of a number of mitigation measures that have been embedded into the design. These are detailed in section 3.4 of **APP-027** and in summary include: retaining existing hedgerows; providing fencing and bunding; where possible, undertaking the activities which would be considered likely to cause the most disturbance to birds using the Humber Estuary and fields adjacent to the main works area outside of the overwintering bird period (i.e. during April to October). The measures have been incorporated into the Initial Construction Environmental Management Plan (CEMP) [**REP4-024**].

HRA Matters Considered During the Examination

- 2.7 HRA matters that were considered during the examination were:
- consideration of assemblage constituent species
 - potential impacts on inter-tidal habitats within the Humber Estuary SAC
 - potential impacts on lamprey
 - consideration of Paull Holme Strays Nature Reserve
 - potential impacts on marsh harrier
 - potential noise impacts on Humber Estuary SPA and Ramsar birds
 - sufficiency of ornithological surveys, and
 - mitigation for bird species affected by habitat loss.
- 2.8 These matters are detailed further in Sections 3 and 4 of this RIES.

3.0 LIKELY SIGNIFICANT EFFECTS

Summary of the applicant's HRA Screening exercise

Overview

3.1 The applicant describes what would constitute a Likely Significant Effect (LSE) as *"any effect that may be reasonably predicted as a consequence of a plan or project that may affect the conservation objectives of the features for which the site was designated, but excluding trivial or inconsequential effects"* (paragraph 2.1.15 of **APP-027**).

Potential impacts considered

3.2 The HRA Report [**APP-027**] states that no construction works would take place within the Humber Estuary itself or within the adjacent intertidal habitat and therefore there would be no direct impacts upon the SAC, SPA and Ramsar site (paragraphs 6.2.5, 6.2.12 and 6.2.21 of **APP-027**).

3.3 However, the potential for indirect effects was considered, as detailed in section 5.6 of **APP-027**. The potential construction phase impacts considered were:

- potential displacement and disturbance to SPA/Ramsar bird species within the Humber Estuary SPA/Ramsar site through noise and visual disturbance
- potential displacement and disturbance to SPA/Ramsar bird species in the fields within and adjacent to the construction area through noise and visual disturbance, and
- loss of foraging/ roosting habitat in the fields within and adjacent to the construction area.

3.4 No potential impacts have been identified by the applicant during the operational and decommissioning phases (paragraphs 5.6.3-5.6.6 of **APP-027**).

3.5 In relation to the Humber Estuary SAC, the HRA Report considers potential impacts during construction on the inter-tidal habitat features and potential pollution pathways (paragraphs 6.2.2-6.2.11 of **APP-027**).

In-combination effects

3.6 In-combination effects have been addressed within the HRA report (section 2.2 of **APP-027**). A total of 17 consented or proposed projects within 10km of the proposed development were identified following consultation with NE, East Riding of Yorkshire Council and North Lincolnshire Council and a web-based search (see Appendix 1 of **APP-028**). Of these, the following eight plans/projects were identified by the

applicant as having the potential to give rise to in-combination effects as a result of disturbance to bird species:

- Paull Local Development Order (LDO) Enterprise Zone
- Port of Hull LDO
- Hedon Haven Key Employment Site
- North Killingholme Power Scheme
- Killingholme Energy Centre
- Hornsea Offshore Wind Farm Onshore Infrastructure Scheme
- Able UK Logistics Park, and
- Able Marine Energy Park.

3.7 The locations of these plans/projects are identified on Figure 1 of the applicant's HRA Report [**APP-027**].

Outcome

3.8 The outcome of the applicant's screening assessment is summarised in Table 3.1 of this RIES. The applicant concluded that the project would have no LSE, either alone or in-combination with other projects or plans, on the qualifying features of the Humber Estuary SAC (paragraphs 6.2.2-6.2.11 of **APP-027**).

3.9 However, it acknowledged the potential for indirect effects (as detailed in paragraph 0 of this RIES) on some qualifying bird species of the Humber Estuary SPA and Ramsar site and therefore concluded that a LSE could not be excluded for some qualifying features of the SPA and Ramsar site (section 6.2 of **APP-027** and Appendices 2 and 3 of **APP-028**).

3.10 For the Humber Estuary SPA, the applicant's HRA Report [**APP-027**] identified a LSE for the qualifying features whose peak numbers recorded during bird surveys (undertaken in 2013/14) exceeded the 1% significance threshold of the SPA population (paragraph 8.1.1 of **APP-027**). These are the features identified with a ✓ in Table 3.1 of this RIES (waterbird assemblage species, marsh harrier, bar-tailed godwit, golden plover, dunlin, black-tailed godwit, shelduck, common redshank, ruff and the waterfowl assemblage species).

3.11 For the Humber Estuary Ramsar site, the applicant's HRA Report [**APP-027**] identified a LSE for Criterion 5 (non-breeding waterfowl assemblage) and Criterion 6 (passage populations of golden waterfowl assemblage). A justification for the identification of a LSE for these criteria is not explicitly stated within **APP-027**, however the screening matrices [**APP-028**] state that "*minor impacts [are] predicted*".

3.12 In its SoCG, NE [REP3-019] agreed with the sites and features for which a LSE was identified.

Table 3.1: Summary of the applicant’s screening exercise

Qualifying feature	Screening result* (✓ = LSE alone or in combination X = no LSE alone or in combination)
<u>Humber Estuary SAC</u>	
Estuaries	X
Mudflats and sand flats not covered by seawater at low tide	X
Sandbanks which are slightly covered by seawater all the time	X
Coastal lagoons	X
<i>Salicornia</i> and other annuals colonising mud and sand	X
Atlantic salt meadows <i>Glauco-Puccinellietalia maritimae</i>	X
Other qualifying habitats	X
Embryonic shifting dunes	X
Shifting dunes along the shoreline with <i>Ammophillia arenaria</i> ("white dunes")	X
Fixed coastal dunes with herbaceous vegetation ("grey dunes")	X
Dunes with <i>Hippopha rhamnoides</i>	X
Sea lamprey <i>Petromyzon marinus</i>	X
River lamprey <i>Lampetra fluviatilis</i>	X
Grey seal <i>Halichoerus grypus</i>	X
<u>Humber Estuary SPA</u>	
Waterfowl assemblage	✓
Breeding:	
Great bittern	X
Little tern	X
Marsh harrier	✓

Report on the Implications for European Sites for
River Humber Gas Pipeline Replacement Project

Qualifying feature	Screening result* (✓ = LSE alone or in combination X = no LSE alone or in combination)
Pied avocet	x
Wintering:	
Great bittern	x
Hen harrier	x
Bar-tailed godwit	✓
Golden plover	✓
Pied avocet	x
Dunlin	✓
Red knot	x
Black-tailed godwit	✓
Shelduck	✓
Common redshank	✓
On passage:	
Ruff	✓
Dunlin	✓
Red knot	x
Black-tailed godwit	✓
Common redshank	✓
<u>Humber Estuary Ramsar site</u>	
Criterion 1: Estuary habitats	x
Criterion 3: Grey seals (<i>Halichoerus grypus</i>) and natterjack toad (<i>Buffo calamita</i>);	x
Criterion 5: Non-breeding waterfowl assemblage	✓
Criterion 6: Passage populations of golden waterfowl assemblage	✓
Criterion 8: Migrating sea and river lamprey	x

* See Section 6.2 of **APP-027** and Appendices 2 and 3 of **APP-028**

- 3.13 The applicant's final version of the screening matrices were submitted at Deadline 4 [**REP4-021**]; these summarise the outcome of the screening exercise that is detailed in the HRA Report [**APP-027**].

- 3.14 At Deadline 5, NE [**REP5-007**] confirmed that they agree with the content and conclusions reached within the applicant's final screening matrices [**REP4-021**]. Therefore, the Planning Inspectorate has not needed to revise these matrices, but has detailed below the matters relating to the applicant's screening exercise that were discussed during the examination, as these are not reflected within the applicant's matrices.

Issues discussed during the examination relevant to the screening exercise

Consideration of SPA assemblage features

- 3.15 The Humber Estuary SPA qualifies under article 4.2 of the Birds Directive by regularly supporting over 20,000 waterbirds in any season, as described in paragraphs 5.4.40-5.4.72 of the applicant's HRA Report [**APP-027**]. The Royal Society for the Protection of Birds (RSPB) [**RR-029**] raised concerns with the applicant's approach to assessing the assemblage, stating that populations of the assemblage's constituent species should be assessed on a species-by species basis.
- 3.16 In its first written questions [**PD-006**], the ExA sought comments from NE and the RSPB on the applicant's approach to assessing impacts on the assemblage; NE considered sufficient information had been provided by the applicant [**REP2-017**] whereas the RSPB's concerns remained [**REP2-005** and **REP2-006**]. The applicant considered it had assessed the assemblage species effectively and noted that the approach had been agreed with NE, therefore this remained a point of disagreement that was recorded in the SoCG between the applicant and the RSPB that was submitted at Deadline 3 [**REP3-020**].

Potential impacts on inter-tidal habitats within the Humber Estuary SAC

- 3.17 The applicant's HRA Report [**APP-027**] stated that once the tunnel is installed, it would be flooded with seawater. This would involve pumping water from an extraction point in the Humber Estuary to the drive pit on the Goxhill side of the Humber Estuary through two pipes laid across the mudflats (location identified as Work No 12 on the Works Plans [**REP1-006**]). The HRA Report concluded that there would be localised disruption on the intertidal habitat, however this would be small scale and take no longer than two weeks and therefore "*no significant impacts on the intertidal habitat are considered likely*" (paragraph 6.2.4 of **APP-027**).
- 3.18 In its relevant representation, NE [**RR-023**] requested further information on the vehicle movements associated with the installation and removal of the pipes in order to determine whether the project would have a likely significant effect on the Humber Estuary SAC. The applicant confirmed [**REP2-042**] that the installation of the pipeline for the tunnel flooding

would include up to three people walking out onto the intertidal habitat to place the pipeline and associated pumps into the Humber Estuary. NE subsequently agreed to screen out a LSE on the SAC [**REP2-017** and **REP3-019**].

- 3.19 The SoCG between the applicant and the Marine Management Organisation (MMO) [**REP1-034**] contained details of the pump deployment method and agreed that “*no significant impacts on the intertidal habitat are considered likely*”.
- 3.20 The applicant updated the CEMP at Deadline 3 to reflect discussions they had with NE and MMO to include the methodology for the tunnel flooding (Con F17 of **REP3-010**).

Potential impacts on lamprey

- 3.21 The main text of the applicant’s HRA Report [**APP-027**] did not specifically address impacts on the sea lamprey and river lamprey qualifying features of the Humber Estuary SAC and Ramsar site (Criterion 8). However, email correspondence between the applicant and NE in Appendix 7 of the HRA Report [**APP-028**] shows agreement to scope out lamprey from the HRA.
- 3.22 In the SoCG between the applicant and NE [**REP3-019**], NE agreed to no LSE on the Humber Estuary SAC from the tunnel flooding on the basis that the provision of a screen would prevent lamprey being drawn into the tunnel. NE subsequently confirmed [**REP5-007**] that the requirement for a lamprey screen had been secured through CON-F17 of the CEMP [**REP4-024**].

4.0 ADVERSE EFFECTS ON INTEGRITY

Conservation Objectives

- 4.1 The conservation objectives for the Humber Estuary SAC, SPA and Ramsar site were provided in Appendix 2 of the HRA Report [**APP-028**].

Summary of the Applicant's Integrity Test

- 4.2 Section 8 of the applicant's HRA Report [**APP-027**] provided information to inform an appropriate assessment based on the design envelope detailed in Table 10 of that Report. It considered potential impacts (as detailed in paragraphs 3.2-3.5 of this RIES) on both SPA/Ramsar bird species using the estuarine habitat within the Humber Estuary and SPA bird species in the fields within and adjacent to the construction works.
- 4.3 The applicant's HRA Report concluded that the project would not adversely affect the integrity of any European Site, alone or in-combination with other plans and schemes (paragraph 10.1.5 of **APP-027**).
- 4.4 The assessment is summarised in the applicant's final version of the integrity matrices which were submitted at Deadline 4 [**REP4-021**]. As noted above in this RIES (see paragraph 3.14), NE [**REP5-007**] confirmed that they agree with the content and conclusions reached within **REP4-021**, therefore the Planning Inspectorate has not needed to revise the integrity matrices. However, matters relating to the assessment of impacts on integrity that were discussed during the examination are detailed below.

In-combination effects

- 4.5 Section 8 of the applicant's HRA Report [**APP-027**] considered the potential for in-combination impacts and concluded no adverse effect on the integrity of any Natura 2000 sites and features as a result of the proposed development, alone or in-combination with other plans and projects. At Deadline 5, NE [**REP5-007**] confirmed they are satisfied with the in-combination assessment and the RSPB [**REP5-013**] agreed that there will be no adverse in-combination impacts.

Issues discussed during the examination relevant to the integrity test

Consideration of Paull Holme Strays Nature Reserve

- 4.6 The applicant's HRA Report acknowledged that Paull Holme Strays, a nature reserve managed by the Yorkshire Wildlife Trust, would be likely to be included within the Humber Estuary SAC/SPA at some point in the

future (paragraph 4.2.5 of **APP-027**) and included a number of references to Paull Holme Strays throughout the report.

- 4.7 The RSPB (**RR-029** and **REP2-005**) noted that Paull Holme Strays was created in 2003 by the Environment Agency to provide flood risk management and compensatory habitat for the adverse effects on the Humber Estuary SPA/SAC resulting from the implementation of the Humber Flood Risk Management Strategy. As such, the RSPB considered Paull Holme Strays should be treated as part of the Humber Estuary SAC/SPA/Ramsar due to the protection afforded it as a compensation site under paragraph 118 of the National Planning Policy Framework.
- 4.8 The applicant explained [**REP2-042**] that Paull Holme Strays had been discussed throughout the HRA Report and provided further discussion of potential noise impacts on Paull Holme Strays in a technical note (Appendix B of **REP3-020**).
- 4.9 No further comments were received from the RSPB.

Potential impacts on marsh harrier

- 4.10 The applicant's ornithological surveys identified the presence of marsh harrier at Goxhill (paragraphs 5.4.17-5.4.19 of **APP-027**) and a LSE was screened in for the species on the basis that peak numbers recorded exceeded the 1% significance threshold of the SPA population (Table 9 of **APP-027**). However, no breeding behaviour was noted and no nest sites were known or recorded during the surveys.
- 4.11 An adverse effect on integrity from disturbance was ruled out by the applicant on the basis that foraging marsh harrier would likely "*only be temporarily displaced from foraging areas within and directly adjacent to the construction area*" and as the construction area would be more than 400m from where the birds were recorded (paragraphs 8.3.8 and 8.3.12 of **APP-027**). In addition, suitable foraging habitat for marsh harrier was identified within the construction area but marsh harrier were not recorded using these features (paragraph 8.3.44 of **APP-027**).
- 4.12 However, the RSPB [**RR-029** and **REP2-005**] noted a record from previous breeding bird surveys (undertaken prior to Ground Investigation works linked to the project) which identified nesting marsh harriers close to the Goxhill works site. Therefore, the RSPB considered that the assessment should be updated and an appropriate mitigation strategy developed to address disturbance issues should marsh harriers be found nesting close to the construction compound.
- 4.13 The applicant did not consider that the record altered the assessment as the nesting area was over 500m from the works behind the sea wall and would not be affected at this distance. However the applicant agreed to undertake pre-construction surveys for breeding marsh harrier and

prepare a mitigation strategy if required [**REP2-042**]. This was included at Pre F11 of the initial CEMP [**REP4-024**] and an outline of the mitigation strategy was produced by the applicant (Appendix D of **REP4-024**). This approach and mitigation strategy was agreed with the RSPB in a SoCG [**REP3-021**].

Potential noise impacts on Humber Estuary SPA and Ramsar birds

- 4.14 The applicant's HRA Report acknowledged the potential for temporary displacement of SPA and Ramsar birds as a result of noise disturbance during construction. It noted that noise disturbance would effectively sterilise approximately 40ha (6ha at Paull and 34ha at Goxhill) of arable land within the main works area for the duration of the construction period (paragraph 8.3.36 of **APP-027**).
- 4.15 The applicant modelled the worst case construction noise based on draft plant inventories and indicative site layouts in order to determine effects on SPA/Ramsar bird species outside of the construction area. This modelling took into account bunding and fencing around the construction site (as noted above in paragraph 2.6 of this RIES, these measures have been incorporated into the Initial CEMP [**REP4-024**]).
- 4.16 The HRA Report considered that construction noise levels should be restricted to below 70dB as "*birds would habituate to regular noise below this level; however, where possible, sudden, irregular noise above 50dB should also be avoided, as this causes disturbance to birds*" (paragraph 8.3.19 of **APP-027**).
- 4.17 The HRA Report concluded:
- For SPA/Ramsar bird species using the estuarine habitat - average levels (LAeq) would be less than 50dB at the saltmarsh/intertidal habitat/Paull Holme Strays. The LAm_{ax} could reach up to 73dB during Month 35 (July) at Paull but for the majority of the construction phase, the LAm_{ax} reaching the Humber Estuary would be less than 70dB. An adverse effect on integrity was ruled out on the basis that these levels were below the threshold at which SPA species would be disturbed and were only slightly higher than average background noise levels to which the birds are habituated; and as extra fencing would be placed around activities likely to cause the highest levels of noise (paragraphs 8.3.20-8.3.25 of **APP-027**).
 - For SPA/Ramsar birds in fields adjacent to the construction area – average noise levels (LAeq) would be less than 50-55dB and levels from the noisiest activities (LAm_{ax}) would be 70-80dB. The HRA Report acknowledged the potential for some localised short term displacement of birds but ruled out adverse effects on integrity, stating that disturbance would be temporary during construction; that birds using

the fields would be habituated to existing levels of background noise; and that there were alternative areas available for foraging and/or roosting (paragraphs 8.3.36-8.3.41 of **APP-027**).

- 4.18 However, NE disagreed with the applicant's conclusion and considered that there could be a significant impact on SPA bird species if maximum noise levels (L_{Amax}) are higher than those from existing sources, or if loud noises are experienced more frequently (paragraph 5.2 of **RR-023** and paragraph 6.3.1 of **REP2-017**). Similarly, concerns over noise impacts were raised by the RSPB [**RR-029**], Lincolnshire Wildlife Trust [**RR-019**] and Yorkshire Wildlife Trust [**RR-030**]. This included the need for the applicant to provide an estimate of the frequency of loud noise. No individual species was identified as being specifically affected; comments were made in relation to 'SPA species' as a whole (note the RSPB stated that references in their responses to the SPA should also be taken as referring to the relevant Ramsar components, paragraph 1.4 of **REP2-005**).
- 4.19 The applicant responded [**REP2-042**], asserting that the noise modelling was undertaken on a worst case scenario and that actual noise levels that would be experienced during construction phase would likely be lower than those presented. The applicant maintained their position on the basis that although "*relatively large numbers of birds might be disturbed and potentially displaced from the fields close to the Project, such events would be infrequent...[and]...well within the tolerances of species... Whilst such disturbance might exert some minor energetic stress (i.e. through the need to fly elsewhere), this would have a negligible effect, both on individual birds and on the population as a whole, and would have no impact upon the conservation objectives for the SPA populations of these species*" [**REP2-042**]. However, to provide clarity on some of the matters raised by NE and the RSPB, the applicant produced a supplementary HRA Technical Note (Appendix B of **REP3-020**) which predicted 'likely' noise levels during construction rather than the 'worst case' scenario that was presented in the HRA.
- 4.20 Further to this clarification, the SoCGs between the applicant and NE [**REP3-019**] and between the applicant and the RSPB [**REP3-020**] confirmed that NE and RSPB are "*in agreement with the findings of the predicted likely noise contours presented in the Technical Note (refer to Appendix B) and agree that noise disturbance beyond the construction footprint would be unlikely to have a significant effect upon the SPA bird populations*".

Sufficiency of ornithological surveys

- 4.21 Paragraphs 5.3.3-5.3.11 of the applicant's HRA Report [**APP-027**] describe the ornithological surveys undertaken to inform the assessment.

- 4.22 The RSPB [**RR-029** and **REP2-005**] raised concerns over the sufficiency of the nocturnal survey effort as the dawn and dusk surveys did not cover the periods between dusk and dawn. The RSPB considered that *"the regularity, extent, profitability and importance of feeding by golden plover and lapwing of the Humber Estuary SPA on the fields within and adjacent to the construction compounds"* may have been underestimated and therefore the assessment may have underestimated the fitness and survival implications for golden plover and lapwing from potential habitat loss and disturbance impacts. In response, the applicant explained the difficulties in nocturnal surveying and that the survey methodology was agreed in consultation with NE [**REP2-042** and **REP3-020**].
- 4.23 Whilst disagreement over the sufficiency of the surveys remained between the RSPB and the applicant, both parties agreed that to address the concerns a potentially more precautionary approach to mitigation would be taken. The mitigation remained under discussion during the examination and is discussed below.
- 4.24 The RSPB also raised concerns over the survey effort in the spring passage period [**RR-029**] however following clarification from the applicant that two surveys per month were undertaken, the RSPB were satisfied that the survey effort was sufficient [**REP2-005**].

Mitigation for bird species affected by habitat loss

- 4.25 As the pipeline would be tunnelled beneath the Estuary, the applicant's HRA Report stated that there would be no direct impacts on the designated features of the Humber Estuary SAC, SPA and Ramsar site (paragraph 4.2.3 of **APP-027**). However, the applicant's HRA Report acknowledged that during the construction phase the main works area would result in the temporary loss of approximately 40ha (6ha at Paull and 34ha at Goxhill) of roosting/foraging habitat available to birds associated with the designated sites (Table 10 of **APP-027**). It was considered unlikely SPA species would use the footprint of the main works area due to noise disturbance (paragraph 8.3.36 of **APP-027**).
- 4.26 The applicant concluded that there would be no adverse effects on the SPA bird species on the basis that the loss would be temporary and the fields would be re-instated post-construction; there were other habitats available in the wider area; and the fields that would be lost provide a sub-optimal resource to the SPA birds. The applicant also proposed to set aside part of Field 6⁴ (Work Number 11) at Goxhill for the duration of the construction period to compensate for some of the habitat loss; this would be left as stubble for the duration of the construction works, and would

⁴ Note: The location of the fields are identified on Figure 6 of **APP-027**.

provide an alternative roosting and/or foraging site for birds associated with the SPA (paragraphs 8.3.43-8.3.49 of **APP-027**).

- 4.27 However, NE stated that they were not confident the set-aside area of Field 6 provided "*a large enough area or sufficient quality of habitat to act as an equivalent foraging or roosting resource, in order to mitigate for the effects of disturbance to birds using fields 4, 5 and 6*" (paragraph 5.4 of **RR-023**). This view was echoed by the RSPB [**RR-029**] and Lincolnshire Wildlife Trust [**RR-019**].
- 4.28 The applicant responded that Field 6 is currently intensively managed, therefore setting it aside would enhance the feeding resource for the local overwintering bird population and would be sufficient to mitigate for the loss of habitat under the footprint of the works [**REP2-042**]. Nevertheless, NE [**REP2-017**] and the RSPB [**REP2-005**] continued to argue that the applicant's proposal was insufficient.
- 4.29 At the ISH on 17 November 2015, the applicant proposed revised mitigation measures including, potentially, the installation of gates to control unauthorised vehicular access, and in response to a hearing action identified the possible introduction of other measures in Fields 6 to 8 [**REP4-036**].
- 4.30 At Deadline 6, the applicant confirmed [**REP6-004**] that the mitigation measures agreed with NE and the RSPB included:
- work No 11 (Field 5) to be managed as grassland with a short sward for the duration of the construction period
 - a marshalled, temporary gate to be installed south of Fir Tree Farm to restrict vehicle movements down East Marsh Road during the construction phase and thus reduce disturbance to SPA birds using Fields 6, 7 and 8
 - permanent lockable barriers to be erected at two locations (one on East Marsh Road and one at East Halton Skitter) to reduce disturbance to SPA birds using Fields 6, 7 and 8 and to prevent vehicles from accessing the salt marsh over the sea wall
 - the extension of the red line boundary⁵ to incorporate an additional area of farmland adjacent to the existing redline (Field 8 - the 'Mitigation Land') to be temporarily possessed during construction with the following measures implemented:
 - (i) organic matter to be spread annually for the duration of construction to encourage invertebrate
 - (ii) gas guns not to be used during construction, and

⁵ The applicant's request for the extension to the red line boundary [**REP6-004**] was accepted by the ExA on 1 February 2016 (the date of publication of this RIES) [**PD-014**].

(iii) the height of vegetation to be kept low during the winter period.

- 4.31 Both NE [**REP5-007** and **REP6-020**] and RSPB [**REP5-013** and **REP6-021**] confirmed that they were content with the mitigation package proposed by the applicant and were satisfied that these would ensure there would be no adverse effect on the Humber Estuary SPA and Ramsar site so long as they were adequately secured.

Conclusion

- 4.32 As detailed above, the applicant, NE and RSPB have all agreed that there would be no adverse effects on the integrity of any European sites, provided that all mitigation measures were adequately secured.
- 4.33 At the date of issue of this RIES (1 February 2016), the mitigation package proposed by the applicant at Deadline 6 [**REP6-004**] had not been demonstrated to be secured in updated works plan or an updated draft DCO. However at Deadline 6, the applicant [**REP6-004**] stated that if the non-material change were accepted the extension to the red line boundary would be added as Work No 13 to the works plans and that Requirement 18 could be amended to incorporate all mitigation measures. Revised documents are due to be submitted at Deadline 7, 17 February 2016.

ANNEX 1: DOCUMENTS USED TO INFORM THE RIES

National Grid Gas Application Documents

- Habitats Regulations Assessment Part 1 [**APP-027**]
- Habitats Regulations Assessment Part 2 [**APP-028**]

Procedural Decisions

- Rule 6 letter [**PD-004**]
- Examining Authority's first written questions [**PD-006**]
- Examining Authority decision on the applicant's change request [**PD-014**]

Events and Hearings

- Action Points arising from day one of the Issue Specific Hearings (on Construction and Environmental Impacts - 17 November 2015) [**EV-014**]

Relevant Representations

- Lincolnshire Wildlife Trust [**RR-019**]
- Natural England [**RR-023**]
- Royal Society for the Protection of Birds [RSPB] [**RR-029**]
- Yorkshire Wildlife Trust [**RR-030**]

Deadline 1 Documents [23 September 2015]

- National Grid Gas - 2.2A - Works Plans [**REP1-006**]
- National Grid Gas- 5.4.1- Habitats Regulations Assessment Screening Matrix (updates appendix 3 of Habitats Regulations Assessment) [**REP1-014**]

Deadline 2 Documents [12 October 2015]

- The Royal Society for the Protection of Birds - Written Representation [**REP2-005**]
- The Royal Society for the Protection of Birds - Response to the ExA's first written questions [**REP2-006**]
- Natural England – Written Representation and Response to the ExA's first written questions [**REP2-017**]
- National Grid Gas - 8.8 - Comments on Relevant Representations [**REP2-042**]

Deadline 3 Documents [2 November 2015]

- National Grid Gas - Initial Construction Environmental Management Plan [**REP3-010**]
- National Grid Gas - Draft Statement of Common Ground with Natural England [**REP3-019**]
- National Grid Gas - Draft Statement of Common Ground with RSPB [**REP3-020**]

Deadline 4 Documents [27 November 2015]

- National Grid Gas – HRA Screening Matrix [**REP4-021**]
- National Grid Gas – Initial Construction Environmental Management Plan [**REP4-024**]
- National Grid Gas – Hearing Action Checklist 17 and 18 November 2015 [**REP4-036**]

Deadline 5 Documents [22 December 2015]

- Natural England – Response to the ExA’s second written questions [**REP5-007**]
- The Royal Society for the Protection of Birds – Response to the ExAs second written questions [**REP5-013**]

Deadline 6 Documents [13 January 2016]

- National Grid Gas plc - 8.22 - Response to Rule 17 Letter dated 7 January 2016 and Request for Non-Material Change [**REP6-004**]
- Natural England - Response to Rule 17 issued Thursday 17 January 2016 [**REP6-020**]
- The Royal Society for the Protection of Birds - Response to Rule 17 issued Thursday 17 January 2016 [**REP6-021**]