

#### THE PLANNING ACT 2008

# THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Boston Alternative Energy Facility

Appendix B2 to Natural England's Deadline 2 Submission

Natural England's Comments on Habitats Regulations Assessment - Ornithology Addendum [REP1-026]

For:

The construction and operation of Boston Alternative Energy Facility (AEF) that would generate approximately 102 MW of renewable energy and is located immediately south of Boston town, Lincolnshire.

Planning Inspectorate Reference: EN010095

Appendix B2 Natural England's Comments on 9.13: Chapter 17 Marine and Coastal Ecology and Appendix 17.1 - Habitats Regulations Assessment – Ornithology Addendum [REP1-026]

#### Introduction

This document provides Natural England's response in relation to the following documents:

 9.13: Chapter 17 Marine and Coastal Ecology and Appendix 17.1 - Habitats Regulations Assessment - Ornithology Addendum [REP1-026]

## **Summary of position:**

Following review of the additional ornithological information received, Natural England has reviewed the updated information provided. Two matters are of particular ornithological concern with potential Adverse Effect on Integrity (AEoI) of the Wash SPA:

- Impacts at development site specific to redshank in an area functionally linked to the Wash SPA
- Impacts at the mouth of the Haven area within the Wash SPA specifically affecting birds roosting at high tide in areas that will be impacted by increased boat disturbance

Please be advised that our previous advice included within the Relevant and Written Representation [RR-021] remain unchanged and this response doesn't supersede that response but just provides more information in relation to two matters.

#### **Detailed Comments**

#### 1. Impacts at development site

- 1.1. At the development site there will be a loss of foraging habitat and roosting habitat as a consequence of the development. Of particular concern is the roost provision currently provided by two linked roost sites one on the development site. Redshank are site loyal and adopt set territories in the non-breeding season. Since previous submissions, the need to provide and manage the proposed alternative roost site with redshank-specific features and to undertake annual maintenance to secure the roost habitat has been acknowledged by the Applicant.
- 1.2. Natural England notes that the habitat principles surrounding roost establishment are correctly characterised (para 4.3.5). However, documentation detailing how the site will be effectively managed for redshank is not due to be submitted until Deadline 2

(para 4.3.5). Furthermore, the replacement roost area is within the expected disturbance zone of vessels using the Haven to access the development site which may negate its efficacy as a roost (para 4.3.6). The bird surveys provided confirm that the area is subject to vessel disturbance (para 4.3.3; 6.1.34) and the report confirms that alternative provisions for redshank are being sought (para 4.3.7; 4.3.10). But these are yet to be submitted and therefore Natural England is unable to provide further advice on the significance of any impact.

1.2.1. Whilst Natural England recognises that the risk to the Wash SPA is low if the mitigation is secured and proves suitable roosting habitat; significant doubt remains about the efficacy of the proposals. Without this security a conclusion of no AEol cannot be concluded beyond all significant doubt as the scale of the impacts on the SPA remains unknown. This position will be reviewed in light of material expected to be submitted at Deadline 2.

### 2. Impacts at the mouth of the Haven

- 2.1 The area at the Mouth of the Haven supports a large number of roosting birds. In this area it is agreed that the risk is to roosting birds subject to disturbance by increased vessel traffic. Two types of effect are anticipated: (a) species displaced from roosts by vessel movements which relocate to alternative sites and (b) species where individual birds are subject to repeated disturbance as they do not relocate.
- 2.2 With reference to The Wash SPA Annex 1 non-breeding waterfowl assemblage some 29,395 birds of at least 22 species are at risk of exposure to disturbance with 20,208 birds of 22 species in the most sensitive area (Appendix A1 Table 2). This includes a number of 'key component' species i.e. those for which The Wash SPA is particularly important.
- 2.3 Although this area is subject to disturbance already, including visual disturbance by boats (para 4.3.18), this will be increased from approximately 75-80% of high tides to 100% of high tides for those species that relocate<sup>1</sup> in response to large vessel disturbance events (para 4.1.1); and by approximately 1160 events per annum (para 4.1.1) (from a baseline of 840 (para 4.3.17)) for those that return to the roosts and are subject to repeated disturbance. Natural England notes that despite current levels of

2

<sup>&</sup>lt;sup>1</sup> Please note that advice on impacts from numerous vessel transits on species which are more likely to be repeatedly disturbed and return to the preferred roost is provided in Relevant/Written Rep [RR-021]

- disturbance these roosts are well used, suggesting that they are the preferred roosts when available.
- 2.4 Of these the birds affected the majority of disturbed individuals abandon the roosts in response to vessel passage (e.g. para 6.1.7; 6.1.10; 6.1.14; 6.1.18; 6.1.24) and do not return for the rest of the high tide period. There are therefore two areas of potential AEoI of the site's conservation objectives. Firstly, to individual fitness as a consequence of increased energy expenditure; and secondly to the distribution objective as a consequence of the loss (as a result to disturbance events occurring on 100% of tides) of a significant roost.
- 2.5 In the current documentation [REP1-026] the risk of AEoI is considered without reference to the objectives (maintain vs restore) of individual species, or their individual energy balances and the loss of the Mouth of the Haven roost area permanently is not considered. Natural England considers that an AEoI cannot be ruled out beyond all reason scientific doubt for these impacts. Natural England also notes that while consideration has been given to impacts on a number of individual species which form features of the site, no assessment is made of the Annex I non-breeding waterfowl assemblage as a feature in its own right of the Wash SPA.

#### 3. Conclusion

- 3.1 Natural England advises that, for a number of individual bird feature species and the non-breeding waterbird assemblage as a whole, an Adverse Effect on Integrity cannot be ruled out beyond reasonable scientific doubt for this matter. This position will be reviewed in light of additional material anticipated at Deadline 2.
- 3.2 Natural England advises that, for redshank in particular, there will need to be an updated 'in-combination' HRA assessment on impacts at the development site and Mouth of Haven roosts as both areas of impact affect this species.

Table 1, additional comments:

Section	Comment	RAG status
3.5.2	Natural England welcomes the additional survey data provided. While not representing two full years survey, as is best practise, the additional data does extend the surveyed period considerably and it now includes part of two winter seasons. Although we note that project specific data is not provided for the migratory periods.	
General comment	The Annex II non-breeding waterbird assemblage needs to be added to the scope of the assessment. The assemblage has both numeric and species diversity attributes.	
Table 3.2	WeBS data updated to winter period 19/20 is now available that updates that presented in Table 3.2. While adoption of the most recent data is unlikely to materially change conclusions, it is best practise to use the most up to date data available.	
4.1.1 and 4.3.6	Natural England doesn't believe the approach to assessing impacts as set out in these paras. represents the worst-case scenario for the following reasons: -	
	<ul> <li>i. It is not possible to have 0.6 of a vessel. Therefore, if such an approach is to be used to assess potential impacts from vessels then the figures should be round up to the nearest whole vessel.</li> <li>ii. By averaging impacts across all navigable tides within a year, it fails to distinguish between the variation in total numbers of vessels that could use different tides. Tidal height will vary and therefore disturbance impacts on the highest tides will be greater than the lowest tides as there will be a longer period of time when draught height would allow the larger vessels to use the navigation channel. On the highest tides therefore, up to 5 vessels would be the worst-case scenario (as defined in paragraph 4.1.1, p.24). Some tides will be lower and therefore fewer vessels could navigate The Haven.</li> <li>iii. It is not clear how many vessels movements at night will occur</li> </ul>	
	Therefore, we advise that a more detailed assessment is required to identify the maximum number of vessels that could use any tide throughout a year. This year's tidal heights could be used as a proxy to help determine this. The total numbers of vessels on each tide can then be assessed against the maximum disturbance impact that this could generate. This is important to understand the variation in vessel movements across tides in any given month/yr. and how this could affect qualifying features of The Wash SPA/Ramsar. It would also enable an assessment of the proportion of tides that would be used by vessels at night.	

	This more detailed assessment would then better enable the	
	ecological consequences of the additional vessel movements to be assessed.	
Table 4.9 and Figure 4.1	Whilst this helps understand the trend in vessels movements over time, the impacts on the current population of The Wash SPA/Ramsar need to be considered against the current baseline levels of disturbance to ensure the conservation objectives that are in place are met. That means that the current abundance and distribution of qualifying features of The Wash SPA/Ramsar must be maintained. Where an increase in vessel movements is proposed this must be assessed against the current population figures. Where no data exist to enable an assessment of impacts to be undertaken then it is essential that detailed site-specific and species-specific data are collected.	
4.3.9	Natural England advises that while redshank feed in water up to 8cm deep, where that foraging resource is distributed will vary according to site topography and water table drawdown levels. An optimal water body for redshank will have a varying depth, including areas that are greater than 8cm deep at high water levels and which consequently allows for foraging in different locations according to drawdown levels. This will need to be taken into account when designing any compensation measures	
Fig 4.2	Natural England advises that Figure 4.2 may be labelled to suggest it is a roost map, it is not, it is a WeBS sector map. Within the WeBS sector birds will not be distributed equally, most will be in localised roosts within the sector. These are generally smaller areas. Understanding the distribution of roosts within a sector and their exposure risk to disturbance is important.	
Table 5.1 (transposed from Appendix A1 Table 4)	The column titles suggest that the calculated percentage level of disturbance is based on the number of birds recorded as being displaced during the surveys as a proportion of WeBS counts. Natural England advises that this is in correct as an approach (unless the surveys reliably matched local WeBS populations). The analysis needs to look at the number of birds disturbed as a proportion of those recorded on the bird surveys and then consider what this proportion of the population looks like in comparison to WeBS counts from the survey area.	
	For example, if there are 100 birds using the area (per WeBS) but only 10 are present when a survey is carried out and 5 are seen to be displaced, it is not appropriate to assess risk by comparing the 5 seen to the WeBS count 100, the 5 should be compared to the 10 and the resultant proportion compared to the 100. So, for example, because 50% of the observed birds (5 out of 10 who's reactions were	

	observed were disturbed) of the 100 WeBS birds using the 50%, or 50 individual birds are likely to be displaced when all birds are present. The predicted actual impact of 50 birds is an order of magnitude greater impact on the SPA than the 5 birds actually witnessed being disturbed.  Natural England seek clarification on whether this an erroneous understanding of the data being presented. In light of any changes the species to be taken forward to	
	Appropriate Assessment may change.  Natural England notes that a number of species not taken forward for Appropriate Assessment have high percentage of disturbance response e.g. curlew; bar-tailed godwit; dunlin; grey plover; knot; shelduck; wigeon etc. Given the site conservation objective target of maintaining or restoring the distribution of the qualifying features within the site. Natural England considers that impacts on these species should be considered further.	
6.1.11- 6.1.27	Natural England's view is that species-based interpretation of risk should factor in current population status, site trends, site objectives (as set out in the site's supplemental advice) and species-specific traits. We do not agree with the universal conclusion of 'not significant'. These species assessments also overlook the risk of the Mouth of Haven roost being lost completely due to increased disturbance and the impact of that on the conservation objective target of maintaining or restoring the distribution of the qualifying features within the site.	
6.1.37	This paragraph includes reference to impacts at the Mouth of the Haven in a section that is otherwise concerned with impacts at the development site. For redshank assessments of impact at both the development site and the Mouth of Haven need to be undertaken alone and then the two considered in-combination.	
6.1.40	Proposed measures to ameliorate impacts at the development site are not yet set out or secured. Therefore, we are unable to provided further conservation advice on this matter at this stage.	
6.1.56 – 6.1.57	Proposed measures to ameliorate impacts at the development site are not yet set out or secured. Therefore, we are unable to provided further conservation advice on this matter at this stage.	
Appendix A1 Table 2	Natural England notes that the data for the wider Mouth of Haven area indicates at least 22 species utilising the area with 22 species exceeding 1% of the SPA population and 15 species exceeding 5% of The Wash SPA population on occasion. In total over 29,395 individuals (over 7% of current Wash population) are recorded. <b>These figures</b>	

	demonstrate that the area is of high value for SPA species.	
Appendix A1 Table 3	Natural England notes that the data for the most at risk part of the Mouth of Haven area indicates at least 22 species utilising the area with 19 species exceeding 1% of the SPA population and 14 species exceeding 5% of The Wash population on occasion. In total over 20,208 individuals (over 5% of current Wash population) are recorded. These figures demonstrate that the area is of high value for SPA species.	
Appendix A1 Section 3.2	We note that knot and bar-tailed godwit are considered to have a surprisingly low population in the Mouth of Haven area, and it is suggested that vessel activity may already be impacting bird use of the area.	