THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Boston Alternative Energy Facility

Appendix B3 to Natural England's Deadline 5 Submission

Natural England's Advice on Ornithology Documents Submitted at Deadline 3 and 4

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

25th January 2022

Natural England's Comments on Ornithology Documents Submitted at Deadline 3 & 4

Introduction

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

- 9.43 Autumn Surveys of Waterbirds at the Principal Application Site [REP3-019]
- 9.50 Noise Modelling and Mapping Relating to Bird Disturbance at the Principal Application Site [REP4-015]
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Summary

NE concurs with the conclusion that most construction activity will pose a low risk. Piling activity will however cause disturbing levels of noise.

NE welcomes the restriction of piling activity to the summer months and concurs that this will lower the risk. However, we do not concur with the statement '… including the location of the redshank roost in the Habitat Mitigation Area (during months where few redshank will be using it).' Peak numbers of redshank in the UK generally occur in September which overlaps with the identified piling period. Disturbance in this period may affect other passage species, such as ruff. Where possible piling activity should be managed so that piling in areas proximate to the Haven should take place first and piling in more distant areas should happen later unless operational necessity precludes this. Where piling is being carried out, which may temporarily affect the Haven, sound screening should be deployed to reduce impacts.

The proposed monitoring of birds to assess risk is appropriate and should be conditioned if the development is to be consented, but the survey area should be extended beyond the 250m identified where noise levels beyond this distance may pose a risk.

Operational noise levels are generally at a level where impacts would not be anticipated except in the vicinity of the facility itself. Consideration should be given to noise reduction around the two point sources identified.

Therefore, we advise that further commitments to mitigation measures as set out above are required by the Applicant to ensure that the impacts are further minimised. Once agreed this should be secured in the DCO/dML or as part of a named plan.

Detailed comments on Autumn Surveys of Waterbirds at the Principal Application Site [REP3-019]

	Paragraph No.	Text provided by Applicant	Comment	RAG status
1.	5.1.1	'*Ruff were shown to occur in locally significant numbers. Ruff were recorded on seven visits, with a peak count of 32 at a single section, 40% of The Wash population, 51 Ruff were recorded across both sections on 25th September this equates to 63.75% of The Wash population based on current available 5-year means. Both counts are significant when the size of the site is taken in consideration and compared to the size of The Wash'*	NE concurs with the conclusion of the survey that Ruff numbers in the survey areas (and therefore proximity of the development site) are significant and that impacts on ruff should be considered alongside impacts on redshank in this area. Ruff need to be considered in the HRA specifically when assessing impacts on the SPA from the development at the development site (in addition to mouth of Haven concerns). It is the view of NE that interventions to manage risk to redshank in this area are likely to also support the ecological needs of ruff.	

Comments on Noise Modelling and Mapping Relating to Bird Disturbance at the Principal Application Site [REP4-015]

	Paragraph No.	Text provided by Applicant	Comment	RAG status
2.	1.1.1	'*piling for construction of a new wharf at the Principal Application Site will be confined to June, July, August and September*.'	Piling represents the highest risk activity as it is generally the loudest activity on site. Restriction to the June-Sept piling window will limit exposure to Annex I over-wintering birds but not Annex I passage birds. However, SPA birds are unlikely to be as stressed by other factors such as weather conditions and prey availability during this period. Therefore, we remain supportive of the mitigation measure if it can be appropriately secured in the DCO/dML or a named plan.	
3.	1.1.1	'*recommendations from monitoring bird numbers in proximity to geotechnical investigation (GI) works in The Haven as part of the design preparation for a localised crest raising scheme to improve the current Standard of Protection along the Boston Haven (Environment Agency 2019), a 250 m Monitoring Zone for birds around construction noise/visual sources of disturbance is proposed for the construction period'*	Natural England queries how this mitigation measure will be secured and if this mitigation measure has been included in the in-combination risk assessment?	
4.	1.1.1	*'If numbers of birds of a waterbird species present within the 250 m zone (e.g. at the start of the working day) exceed 1% of the species' Wash SPA population (as documented in the most recent five years of the British Trust for Ornithology (BTO) Wetland Birds Surveys (WeBS)), behaviour and responses to works will be monitored.'*	NE agrees with this approach but advises that disturbance will be driven more by sound levels than distance. The Applicant needs to ensure that disturbing noise levels are not anticipated to persist more than 250m form the point source. If they extend more than 250m (see comments on 2.1.2 below) then the survey area will need to increase to reflect this.	
5.	1.1.1	*'If considered to be currently or potentially about to cause disturbance that would disrupt their roosting activity (as an example minimum response; untucking and raising heads for a minimum period, to be agreed), works will be reduced, paused or*	NE agrees that, subject to the above caveat, this is a pragmatic and adaptive approach to managing risk. Adoption of this surveillance and adaptive management of risk should be conditioned into the consent on the face of the DCO/dML or in a named plan.	

		postponed in that location until the behavioural change is reduced (and does not occur again if the noise levels increase) or until numbers present recede e.g. due to birds moving off to use habitat that becomes available as the tide changes.'		
6.	1.2	'*ES Chapter 17 and Appendix 17.1 – Ornithology Addendum (document reference 9.13, REP1-026), the species occurring in the highest numbers at the Principal Application Site relative to their reported British Trust for Ornithology (BTO) Wetland Birds Survey (WeBS) populations in The Wash, are redshank (a named designated feature of The Wash SPA/Ramsar/SSSI 3 km away) and named non-breeding waterbird assemblage species of The Wash SPA/Ramsar/SSSI ruff Philomachus pugnax'*	NE welcomes the recognition of ruff as well as redshank as a species of concern at the development site and concurs with this assessment. However, further work is required to ensure that the impacts are avoided, reduced, mitigated and where that is not possible compensated for. Please see NE advice on significance of impacts.	
7.	1.2	'*..connectivity is not ruled out for all of the individuals present in Areas A and B. This will be discussed further within an ornithology technical note to be submitted for Deadline 5…*'	Noted. NE awaits this information at Deadline 5. Until then our advice remains unchanged.	
8.	2.1 vs Table 2.1	*'..Wright et al. (2010) specifically considering impulsive sources of noise such as piling, suggested 60dB (at bird) could cause flight responses'*	Text identifies 60dB as an appropriate threshold, but table identifies >55dB as threshold (redshank and mallard). NE accepts that >55dB is an acceptable, and precautionary, screening threshold.	
9.	2.1.1	*'Construction no piling in daytime: 'the predicted receptor noise level is 49.7dB' (at mitigation roost); 'noise levels of 50-56dB over most of the adjacent length of The Haven' (foraging areas)'*	NE accepts that during the daytime no piling construction noise disturbance is unlikely to be detrimental at the roost site and over most foraging areas.	
10.	2.1.2	*'Construction with piling in daytime: 'At the highlighted redshank roost site in this location (the point receiver within Area B (as shown on Figure 11) in Figure 21 below), the predicted*	NE considers that piling activity is likely to be disturbing to both birds using the mitigation roost area and foraging. NE considers that managing this activity to the months of June-September as identified at 1.1.1	

		*receptor noise level is 58.5dB' (at mitigation roost); '). Along an approximately 400m section of The Haven in bird survey area A (in line with the constructions on Principal Application Site), noise levels are modelled to range from 66-68dB on the opposite bank of The Haven to 74-76dB on the near side of The Haven (**Figure 2-2**, **Figure 2-3**)' (foraging areas)'*	will reduce risk to key species as will the adaptive management provisions identified at 1.1.1. NE considers it important that these safeguards are in place while this activity is ongoing. Therefore, an outline mitigation management plan is required prior to consent with a condition that the final plan is agreed in consultation with NE prior to the works commencing. This is be secured in the DCO/dML	
11.	2.1.2	*'Using the 54-56dB contour as a guide, there is an approximate 450 m radius around piling-period construction sources within which redshank would experience 'caution' levels of at-bird noise level or higher'*	NE notes that the 450m zone of risk is greater than the 250m identified in 1.1.1 and advises that the 450m zone is the correct one for the application of the adaptive management.	
12.	2.1.3	'Construction without pilling at night: 'the predicted receptor noise level is 37.6dB.' (at mitigation roost); with noise levels reaching 44-48dB on The Haven (foraging areas)'	NE accepts that at night time no piling construction noise disturbance is unlikely to be detrimental at the roost site and foraging areas.	
13.	2.2.1	'Operational phase: 'the predicted receptor noise level is 38.8dB during the day and 37.6dB at night' (mitigation roost area); 'reaching 54-56dB in two small areas (a radius of around 30 m and 40 m around the two respective point' (foraging areas)'	NE accepts that operation noise disturbance is unlikely to be detrimental at the roost site. Some disturbance may occur affecting foraging areas and best practise would see these point source areas being managed to reduce noise levels e.g., through adoption of noise screens around the point sources. It should be noted that these noise levels risk permanent loss unlike the similar noise levels identified at 1.1.2 (construction no piling) as those are temporary. Therefore, we advise that further commitments to mitigation measures as set out above are required by the Applicant to ensure that the impacts are further minimised. Once agreed this should be secured in the DCO/dML or as part of a named plan.	