THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Outer Dowsing Offshore Wind Farm

Appendix E1 to the Natural England Deadline 1 Submission

Natural England's comments and updated advice on Marine Mammals [PD1-045, PD1-047, PD1-071 and PD1-094]

For:

The construction and operation of Outer Dowsing Offshore Wind Farm located approximately 54 km from the Lincolnshire Coast in the Southern North Sea.

Planning Inspectorate Reference EN010130

24th October 2024

Appendix E1 – Natural England's Advice on documentation related to Marine Mammals

In formulating these comments, the following documents have been considered in relation to the impacts of Outer Dowsing Offshore Wind Farm (ODOW) on marine mammals:

- [PD1-045] 8.6.1 Outline Marine Mammal Mitigation Protocol for Piling Activities Tracked
- [PD1-047] 8.6.2 Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance Tracked
- [PD1-049] 8.7 In Principle Southern North Sea Special Area of Conservation Site Integrity Plan V2 Tracked
- [PD1-071] 15.3 The Applicant's Response to Representation Responses - Natural England
- [PD1-094] 15.12 iPCoD Interim Population Consequences of Disturbance Modelling Report
- [APP-066] 6.1.11 Chapter 11 Marine Mammals
- [APP-099] 6.2.11 Chapter 11 Marine Mammals Figures

1. Introduction

The key points raised below in Sections 2, 3 and 4 focus on singular points raised from the submission, reflecting the Applicants response to Natural England's Relevant Representations submission [PD1-071].

Natural England's detailed comments on the Outline Marine Mammal Mitigation Protocol for Piling Activities Tracked [PD1-045] are documented in Table 1, the Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance Tracked in Table 2 [PD1-047].

2. Noise Abatement Systems (NAS) - Noise Reduction at Source Mitigation

Natural England's advice regarding Noise Abatement Systems (NAS) or noise reduction at source as mitigation remains unchanged. Natural England expects to see the Applicant make a commitment to using these as mitigation.

Noise abatement systems are proven to reduce the level of noise generated by piling and its propagation through the marine environment. As the noise levels are reduced at or close to the source, the range and area over which noise-related impacts occur will be reduced significantly.

In March 2024, the Marine Management Organisation (MMO) and Defra announced the expectation that all offshore wind pile driving activity in English waters should demonstrate that they have utilised best endeavours to deliver noise reductions through the use of primary and/or secondary noise mitigation methods in the first instance from January 2025 and we expect that the majority of piling from 2025 onwards will not be able to go ahead without noise abatement in place.

3. **Harbour seal population in the Wash and North Norfolk Coast (WNNC) Special Area of Conservation (SAC)**

The population of harbour seals in The Wash and North Norfolk Coast (WNNC) Special Area of Conservation (SAC) is in decline. The cause of the decline is unknown; there are several research projects investigating the potential causes, and until the cause of the decline is found, any activities that have the potential to hinder recovery of the population need to be carefully assessed for less impactful alternatives.

Natural England wishes to re-iterate our advice as provided within our Relevant Representations [RR-045]. Disturbance impacts to harbour seal from piling which could further hinder the ‘restore’ objective of The WNNC SAC should be avoided, reduced or mitigated. Natural England advises that if impactful noise from the project reaches the SAC, additional mitigation measures, for example, NAS, should be implemented.

In this case, the use of NAS, or other suitable alternative to reduce sound at source, and planning noisy activities to avoid sensitive timings has the potential to reduce disturbance to the population. As advised in RR-045, disturbance at sensitive times should be avoided, for example during pupping season (June, July and August).

4. **Disturbance Contours – Harbour Seal**

It is unclear if the disturbance contours for harbour seal in Figure 11.4 [APP-099] of Chapter 11 [APP-066] overlap with The WNNC SAC. Natural England requests to see a figure containing the noise contours as presented in Figure 11.4 of Chapter 11 with the border of

The WNNC SAC to understand the extent of the overlap. Furthermore, the barrier impacts from the piling at the Offshore Reactive Compensation Platform (ORCP) was not evident until the noise contour figures were published in the Environmental Statement. This new evidence is potentially concerning considering the harbour seal decline.

5. Interim Population Consequences of Disturbance (iPCoD) Modelling

Natural England welcomes the submission of the Interim Population Consequences of Disturbance Modelling (iPCoD).

The iPCoD modelling was requested as a tool to support the conclusions in the Impact Assessment that were not supported by robust evidence. Owing to evidence gaps in the relationship between marine mammal ecology, sound, disturbance and population impacts, this modelling makes many assumptions and caution should always be taken when interpreting the outputs of any model.

Therefore, although the model can be used as a tool alongside other methods for assessing the long-term population level impacts of disturbance, the results of the iPCoD modelling should not be viewed in isolation or solely dictate the final significance conclusion.

Table 1 Natural England's Detailed Comments: [PD1-045] 8.6.1 Outline Marine Mammal Mitigation Protocol for Piling Activities Rev 2 Tracked

Document reviewed: [PD1-045] 8.6.1 Outline Marine Mammal Mitigation Protocol for Piling Activities Rev 2 Tracked			
NE Ref	**Section**	**Key Concern and/or Update**	**Natural England's Advice to Resolve Issue**
E1.1	4.3.1. Paragraph 19	No commitment has been made by the Applicant to conduct pre-piling searches by qualified Marine Mammal Observers (MMObs)	Natural England advises that pre-piling searches by qualified MMObs are adopted, as this is the minimum requirement set out in the Joint Nature Conservation Committee (JNCC) guidelines for minimising the risk of injury to marine mammals from piling noise (JNCC Piling Guidelines (August 2010)).
E1.2	4.3.2. Paragraph 22	The Applicant has stated that Passive Acoustic Monitoring (PAM) can be used to supplement visual monitoring during periods of poor visibility, such as when there is fog, high sea state or at night, to allow piling to commence during these conditions. However, PAM cannot effectively detect harbour porpoises at a distance greater than 300m, and therefore animals could still be within the Permanent Threshold Shift (PTS) onset range without detection.	Natural England does not recommend piling commences during poor visibility conditions. PAM is an effective method to supplement visual observations to detect vocalising animals underwater.
E1.3	4.3.7 Paragraph 3	This project's maximum hammer energy of 6600 kJ is higher than previous projects that have used >10% maximum hammer energy for soft-starts.	Natural England's advice from Relevant Representations remains unchanged. Natural England advice that the soft-start should commence at no higher than 10% of the maximum hammer energy, therefore reducing the proposed soft-start of 15% maximum hammer energy (990 kJ) to 10% of maximum hammer energy (660 kJ).

Table 2: Natural England's Commons Advice On: PD1-047] 8.6.2 Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance

Document reviewed: [PD1-047] 8.6.2 Outline Marine Mammal Mitigation Protocol for Unexploded Ordnance Clearance Rev 2 Tracked			
NE Ref	**Section**	**Key Concern and/or Update**	**Natural England's Advice to Resolve Issue**
E2.1	4.2 Paragraph 14	Natural England supports the increase in mitigation zone. It is important for the final Marine Mammal Mitigation Protocol (MMMP) to consider how this zone can be effectively monitored to ensure all marine mammals can be detected.	This may require using more Marine Mammal Observers (MMObs) and implementing stricter limits on workable weather conditions. If effective monitoring cannot cover the PTS impact zone, other methods of mitigation or sound reduction at source will be required.
E2.2	4.3 Paragraph 15	No commitment has been made by the Applicant to conduct a pre-detonation search by a qualified MMOb.	Natural England advises that a pre-detonation search by a qualified MMOb is adopted since this is the minimum requirement from the Joint Nature Conservation Committee (JNCC) guidelines (JNCC guidelines for minimising the risk of injury to marine mammals from using explosives (August 2010)).
E2.3	4.3 Paragraph 16	The Permanent Threshold Shift (PTS) onset range for high order Unexploded Ordnance (UXO) donation, could be larger than the area that can be effectively monitored by visual observers. Therefore, the delay in operations needs to reflect the distance a marine mammal needs to travel to flee the PTS onset range.	Natural England recommends the delay in operations needs to reflect the distance a marine mammal needs to travel to flee the PTS onset range. There should also be consideration for how the remainder of the PTS onset range will be mitigated, for example the distance to which an Acoustic Deterrent Device (ADD) is effective.
E2.4	4.3 Paragraph 18	The Applicant has stated that a Passive Acoustic Monitoring (PAM) system, operated by a trained operator, may be used to supplement visual monitoring during conditions of reduced visibility, such as fog, high sea state or at night. However, the minimum mitigation requirement set out in the JNCC guidelines for UXO operations state that the mitigation zone must be visually observed.	Natural England advises that commencement of UXO detonations should not occur during periods of reduced visibility. JNCC guidelines (2023) state "*The minimum mitigation requirement in these guidelines is that the mitigation zone is* ***visually*** *observed for the presence of marine mammals."* PAM can be used to supplement visual monitoring to detect vocalising animals that are underwater.
E2.5	4.3 Paragraph 23	No commitment has been made by the Applicant to conduct visual marine mammal watches, conducted by MMObs 30 minutes prior to ADD activation.	Natural England recommends that visual marine mammal watches, conducted by MMObs 30 minutes before ADD application are implemented. This might require the visual watch to be longer than one hour.