THE PLANNING ACT 2008

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

FIVE ESTUARIES OFFSHORE WIND FARM

Appendix B7 to Natural England's Deadline 7 Submission
Natural England's Marine Processes Advice on the Applicant's Deadline 5 and 6 Documents

For:

The construction and operation of Five Estuaries Offshore Wind Farm, located approximately 57 km from the Essex Coast in the Southern North Sea.

Planning Inspectorate Reference EN010115

03 March 2025

Appendix B7 Natural England's Marine Processes Advice on the Applicant's Deadline 5 and 6 Documents

In formulating these comments, the following documents have been considered:

- [REP5-042] 9.31 Schedule of Mitigation – Routemap -Revision B (Tracked)
- [REP5-028] 9.13 Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan – Revision C (Tracked)
- [REP6-038] 10.20.1 Technical Note – Methodology for Determining MDS (Offshore) - Revision C (Tracked)

1. Summary

We advise that the Applicant should make every effort at the consenting phase to minimise decommissioning impacts and to consider changes to the pre-construction baseline and original environmental impact assessment.

We also advise that the Applicant should make every effort to retain dredge material within the local sedimentary system at Margate and Long Sands Special Area of Conservation (MLS SAC).

Please see our previous advice in relation to there being 3 disposal sites rather than the 2 included within 9.8 Dredge disposal site characterisation report.

Natural England notes in Section 3.1.6 of [REP6-038] 10.20.1 Technical Note for Determining MDS (Offshore) that the 5,400m^2 MDS for cable protection within MLS SAC includes provision for cable protection over the lifetime of the project. Please see Annex E1 of Appendix E to natural England's Relevant Representation on Benthic and Intertidal Ecology [PD2-007] which clearly sets out the expectations in relation to cable protection during the O&M phase from cable repair/replacement. Please note that any new areas of cable protection would need a separate marine licence.

1.1. Detailed comments

Table 1: Natural England's Advice on: [REP5-042] 9.31 Schedule of Mitigation – Routemap – Revision B (Tracked)

Document reviewed: [REP5-042] 9.31 Schedule of Mitigation – Roadmap – Revision B (Tracked)			
NE Ref	**Section**	**Key Concern and/or Update**	**Natural England's Advice to Resolve Issue**
1	Table 2.1/ID 235	We welcome the Applicant's consideration of the environmental impacts of decommissioning. The Applicant states that removal of infrastructure above the seabed at the end of the operational lifetime of Five Estuaries could lead to greater environmental impact than leaving some components in situ, in which case certain components may be cut off at or below the seabed.	We advise that every effort should be made at the consenting phase to ensure that decommissioning impacts can and will be minimised as much as possible through project design commitments. Baseline conditions at the end of project life may differ significantly from those at pre-construction and the value of receptors may also have changed over the lifetime of the project. Therefore, the pre-construction baseline will need to be updated, supported with up-to-date surveys. An updated EIA should also be carried out to assess potential long-term impacts to the physical environment and marine processes, of any assets left in situ.
	ID 236	Natural England is disappointed that rock placement is still included along the entire ECC.	Natural England advises that within MLS SAC that other external cable protection options should be progressed which are less likely to cause wider environmental impacts and support recovery than rock.

Table 2. Natural England's Advice on: [REP5-028] 9.13 Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan (Revision D) (Tracked)

Document reviewed: [REP5-028] 9.13 Margate and Long Sands Special Area of Conservation Benthic Mitigation Plan (Revision D) (Tracked)			
NE Ref	**Section**	**Key Concern and/or Update**	**Natural England's Advice to Resolve Issue**

1	3.2.1	We welcome the Applicant's commitment to deposit material from MLS SAC using a discharge pipe or downpipe to ensure that sediment is retained within the local sediment transport system.	We advise that the Applicant should aim to discharge removed materials solely during periods of slack water and upstream of the cable trench to maximise the disposal of material in the desired location (i.e. MLS SAC) and to minimise fluidisation/dispersion of material into the water column and away from the SAC'. This will help retain as much of the material in the SAC as possible.

Table 3. Natural England's Advice on: [REP6-038] 10.20.1 Technical Note – Methodology for Determining MDS (Offshore) – Revision C (Tracked)

Document reviewed: [REP6-038] 10.20.1 Technical Note – Methodology for Determining MDS (Offshore) - Revision C (Tracked)			
NE Ref	**Section**	**Key Concern and/or Update**	**Natural England's Advice to Resolve Issue**
1	2.5	Natural England notes that in Table 2.1 [APP-071], the estimated total volume of sediment disturbed due to inter-array and export cable installation was based on the assumption that 50% of material is ejected from the trench whilst the remainder of the material is fluidised, but retained as sediment cover in the trench. However, in the updated MDS Technical Note [REP6-038], the Applicant states that the 50% assumption was used because in most cases during simultaneous lay and bury activities less than 100% of material in the trench is expected to be ejected into the water column. It is also stated that pre-lay trenching may be used (for cable installation), in which case the full 100% volume of material will be excavated. However, is also stated that it is unrealistic that the maximum depth of 3.5m will be required or	Natural England advises that firstly, the Applicant should clarify whether the most realistic worst case burial depth is 1.75m or 3.5m. Furthermore, given that the geotechnical properties across the array areas and offshore export cable corridor are yet to be confirmed, and the possibility that a combination of cable burial techniques may be used, we advise that the Applicant should adopt a worst-case cable burial depth and percentage of sediment disturbance in their calculations and assessments. This is in line with other recent OWF marine processes EIAs (see [APP-013] Hornsea Project Four). (This is the same advice provided in Appendix P7 to our Deadline 7 submission).

		achieved for the pre-lay trench and will actually tend towards a typical average burial depth of 1.75m. Due to continued uncertainty in relation to assessment undertaken by the Applicant, Natural England is unable to advise on the worse-case scenario with any confidence.	
2	3.1.6	Natural England notes that the Applicant has stated that the total length of cable protection of 5,400m^2 includes any cable protection required as a result of cable repair or cable exposure during operation. Natural England advises that this approach is inconsistent with standard best practice advice on the placement of cable protection within designated sites and commitments made by the Applicant in the DCO/dML to seek a separate marine licence for the placement of cable protection over the lifetime of the project. It therefore remains unclear what the MDS is for cable protection is.	Natural England advises that the Applicant should provide further clarification on the Maximum design scenario for cable protection. Please see Annex E1 of Appendix E to Natural England's Relevant Representation on Benthic and Intertidal Ecology [PD2-007] which clearly sets out the expectations in relation to cable protection during the O&M phase from cable repair/replacement. Please note that any new areas of cable protection would need a separate marine licence.