

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Morgan and Morecambe Offshore Wind Farm: Transmission Assets

Appendix B5 to Natural England's Deadline 5 Submission Natural England's comments on Physical Processes and Benthic Subtidal and Intertidal Ecology

For:

The construction and operation of the Morgan and Morecambe Transmission Assets located approximately 0 - 37 km off the Northwest English Coast in the Irish Sea.

Planning Inspectorate Reference EN020028

Appendix B5 Natural England's comments on Physical Processes and Benthic Subtidal and Intertidal Ecology

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

- [REP4-019] F1.5.3 Environmental Statement Volume 1 Annex 5.3: Commitments Register (Tracked)
- [REP4-073] J19 Outline Offshore Operations and Maintenance Plan Rev F02 (Tracked)
- [REP4-075] J20 Offshore In-Principle Monitoring Plan Rev F03 (Tracked)
- [REP4-122] Annex to Applicants response to MMO and NE submission at Deadline
 3: Assessment of Seabed Level Vertical Variability for Morgan Offshore Wind Farm-Appendix C Rev F01
- [AS-81] Outline Landfall Construction Method Statement

1.1. Summary

Natural England welcomes the commitments made by the Applicant. However, we draw the ExA and Applicant's attention within this response to where those commitments could be strengthened and further information is required to support those commitments. Our advice is also reflected in Natural England's Risk & Issues Log (Appendix K5) submitted at Deadline 5.

We note that the Applicant is submitting further information at Deadline 5 and therefore we anticipate that this advice is likely to require further updates.

1.2. Detailed comments

Table 1: Natural England's Advice On: Commitments Register [REP4-019]

Doci	Document reviewed: [REP4-019] F1.5.3 Environmental Statement Volume 1 Annex 5.3: Commitments Register				
NE	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issue		
Ref					
1	CoT47	CoT47: The Outline Offshore Cable Specification and Installation Plan (CSIP) includes measures to limit the extent of cable protection to 3% of the offshore export cable route within the Fylde (Marine Conservation Zone) MCZ (excluding cable crossings). Within the Fylde MCZ, external cable protection will only be used where deemed to be essential, e.g. for cable crossings or in the instance that adequate burial / reburial is not possible for any section of the route through the Fylde MCZ. The Outline CSIP also includes measures to limit sandwave clearance to up to 5% of the offshore export cable corridor route within the Fylde MCZ. Material arising from sandwave clearance in the Fylde MCZ will be deposited within the Fylde MCZ. The requirements for cable protection and sandwave clearance will be informed through the undertaking of survey works preconstruction. Detailed CSIP(s) will be developed in accordance with the Outline CSIP. Natural England welcomes the inclusion of this commitment. We note that material arising from sandwave clearance in the Fylde MCZ will be deposited within the Fylde MCZ. However Natural England notes that further mitigation regarding impacts from sediment deposition within Fylde MCZ are not committed to and secured.	Natural England advises that further commitments are required for any deposition with the MCZ i.e. disposition should be done using a fall/down pipe, to ensure it can deliver other required mitigation measures such as within similar sediment to that cleared, adjacent to and updrift of the sandwave. We advise that this is required to enable sandwave recovery within the designated site.		
2	CoT115	CoT115: An Offshore In-Principal Monitoring Plan (OIPMP) has been prepared and submitted as part of the	Natural England advises that the adequacy of benthic compensation would be reviewed as part of strategic compensation measures.		

		application for development consent. The OIPMP includes for monitoring of the recovery of sediments and benthic communities within representative areas of the Fylde MCZ potentially impacted by sandwave clearance, cable installation and cable protection, at appropriate temporal intervals as part of the operational asset integrity surveys. Detailed Offshore Monitoring Plans will be produced prior to operation and maintenance phases in accordance with the OIPMP, and will be approved in consultation with statutory advisors and regulators This commitment outlines proposals in the OIPMP to monitor seabed and benthic recovery in Fylde MCZ. There is no information about what would happen if a greater impact than predicted occurs.	However, project monitoring would need to ensure that the post-construction impacts are reflective of the EIA predictions. Should impacts be found to be greater than predicted then there should be a commitment for the Applicant to undertake remedial actions and undertake further monitoring accordingly.
3	CoT116	CoT116: Any material arising from sandwave clearance within the Transmission Assets Order Limits will be deposited in close proximity to the works and within the licensed disposal sites within the Order Limits, as detailed in the Dreding and Disposal - Site Characterisation Plan prepared and submitted as part of the application for development consent. Natural England welcomes this commitment, however we recommend that an amendment to ensure that this commitment only relates to outside of designated sites.	Natural England draws the ExA to point 1 above and recommends this commitment is made clearer.
4	CoT133	CoT133: No cable/scour protection shall be permanently deployed in the intertidal area between Mean Low Water Springs (MLWS) and Mean High Water Springs (MHWS). Whilst Natural England welcomes the inclusion of this commitment is not sufficient to alleviate our concerns in relation to disruption of sediment transport from the	Whilst Natural England acknowledges that a commitment has been made to not deploy cable/scour protection within the intertidal 'permanently', this commitment only partially addresses our concerns. For example, there are still unknowns around impacts during the project lifetime, the maximum duration of deployment, the certainty of successful decommissioning along and impacts would be associated with decommissioning.

		placement of scour/cable protection within the intertidal for the duration of the project.	
5	CoT134		N/A
6	CoT135	CoT135: The Applicants will not plan routine O&M activities in the original Liverpool Bay SPA (as designated in 2010), including a 2 km buffer between November and March (inclusive) unless in urgent circumstances. Natural England welcomes this commitment. We highlight this is mainly relevant to offshore ornithology, this has been reflected in our Risk & Issues Log (Appendix K5) submitted at Deadline 5.	N/A

Table 2: Natural England's Advice On: Offshore In-Principle Monitoring Plan [REP4-75]

Doc	Document reviewed: [REP4-075] J20 Offshore In-Principle Monitoring Plan – Rev F03			
NE Ref	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issue	
1	Table 1.3	Natural England welcomes the development of monitoring commitments to include benthic ecological monitoring at pre-construction and operational phases.	Whilst we consider the level of detail provided in the OIPMP at the consenting is appropriate, we advise that further detail on benthic ecological monitoring will need to be provided for the IPMP during the post-consent phase. We advise that benthic monitoring proposals include pre-construction surveys designed to provide a robust baseline from which temporal changes in the benthic attributes (as listed within	

			Natural England Supplementary Advice on Conservation Objectives) can be confidently determined. For example, survey objectives should be expanded to include consideration of species composition of component communities, presence and abundance of key structural and influential species etc. We advise that the baseline survey specifications should be repeated post construction for a minimum of 3 years and/or once full recovery has been demonstrated, whichever is the greatest period.
2	Table 1.2	Natural England continues to advise that there is a lack of monitoring commitments for physical processes in the OIPMP.	 We continue to advise the Applicant to carry out monitoring of: Sandwave recovery (particularly within Fylde MCZ); and Dune/beach/intertidal morphology. We highlight that the Morgan Generation Project did include adaptive monitoring to monitor the changes to, and recovery of, sandwaves. See [REP5-043] of the Morgan Gen Examination submission. Pre and post construction monitoring of the landfall construction area should be undertaken to confirm beach recovery to support commitment (CoT27) to remove temporary construction compounds (including cofferdams) and reinstate the site once construction has been completed. If recovery has not been achieved remedial action should be identified. This should also reflect on any change in rates of sand dune erosion.

Table 3: Natural England's Advice On: Outline Offshore Operations and Maintenance Plan [REP4-073]

Doc	Document reviewed: [REP4-073] J19 Outline Offshore Operations and Maintenance Plan – Rev F02		
NE	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issue
Ref			
1	Table	Natural England welcomes the changes to Table 1.1	This has been updated and reflected in our Risk & Issues Log
	1.1	which has now been updated with MDS cable	(Appendix K5) submitted at Deadline 5.
		repair/reburial parameters inside/outside Fylde MCZ.	
2	Table	Natural England notes that the following commitment	Natural England advises as with all other plans/projects that all
	1.1	has been added to Table 1.1: "Inside the Fylde MCZ:	construction activities, including the deployment of cable protection,

deployment of cable protection is limited to the first 2 years of the O&M phase / extent of the marine licensable activity (whichever is first)".	should be conducted within the construction phase due to deleterious consequences for both recovery times and the effectiveness of post construction monitoring.
	If for any reason this approach is demonstrated to be impracticable, Natural England advises that there will be requirement for a greater number of monitoring locations / expanded monitoring periods to mitigate for instances where additional rock protection placed within the 2-year period overlaps or has potential to impact the recovery monitoring locations. We also advise that the ES and MCZ will need reviewing in order for the increased recovery times to be appropriately considered and assessed.

Table 4: Natural England's Advice On: Outline Landfall Construction Method Statement [AS-081]

Doc	Document reviewed: [AS-081] Outline Landfall Construction Method Statement				
NE	Section	Key Concern and/or Update	Natural England's Advice to Resolve Issue		
Ref					
1	Section 1.8	As we have advised during this examination, Natural England notes that the Applicant is also reflects that further geotechnical investigations are required to determine the methodology for cable landfall. However, the Applicant suggests this would be require prior to construction, rather than provide the certainty during examination.	Natural England advises that should further geotechnical investigations be required in the pre-construction phase of the project they will require a separate marine licence.		
2	Section 1.9 and 1.11	Natural England notes that there is discuss about sequency of project installation within section 1.9 and 1.11 and draws the ExA attention to the fact that further mitigation measures could be implemented to minimise the impacts	Natural England advises that it would be beneficial from a nature conservation and designated site management perspective for the Applicant to commit to, the first project installing the joints for both projects. This advise replicates that given on other projects and most recently the Dudgeon and Sheringham Extensions projects and East Anglia 1N and East Anglia 2 projects consents.		
3	Figure 3, (p20)	Natural England notes that limited information is provided as to where the excavated material from 6 exit	Natural England advises that further information is required regarding where excavated sediment will be stored and how this has informed the coastal processes impact assessments.		

		pits shown in fig 3 (p20) will be stored. It is also not clear how this may/may not impact on coastal processes.	
4	1.13.5.3	Natural England notes that this section states the TJBs will be infilled with a mixture of cement bound sand and previously excavated material. However, there is limited information provided in relation to why the cement is required, the depth of deployment and consequences of making this area less resistant to both vertical and horizontal erosion and whether sufficient sediment will remain to infill the excavated areas.	Natural England advises that a further impact assessment is required on the use of cement bound sand. We highlight that this is included as a new issue within our R&I log.
5	1.13.6	A variety of machinery is listed in this section as being needed for landfall construction. Vehicles and trampling can severely damage sand dunes by destabilising them, compacting soil, destroying vegetation and altering dune morphology.	Onshore plant and vehicles and use of the site by construction workers need to comply to best practice. The following list of mitigation measures are known to reduce the impacts of construction works when working in sensitive habitats which should be added to this method statement: • All vehicles and personnel should follow agreed access routes • All site staff/ contractors should all be briefed as to the importance of the site/ habitat via a tool-box talk when they start working on the project; a record of who has had this briefing should be kept. • Restrict staff numbers on site to minimum effective levels. • Welfare facilities and storage of materials should be positioned away from the designated area • Contingency planning prior to works commencing to understand what the process would be to retrieve broken down vehicles/ machinery. • Signage should be used to inform the public of the sensitivities of the site during construction. • Strict pollution control measures should be followed, following industry good practice.