Maritime and Coastguard Agency
UK Technical Services Navigation
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Southampton
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National Infrastructure Planning
Temple Quay House
2 The Square
Bristol, BS1 6PN

25 November 2024

Your ref: EN010121
MCA registration number: 20049474

Dear Sir/Madam

Application by Morecambe Offshore Windfarm Limited for an Order Granting Development Consent for the Morecambe Offshore Wind Farm Generation Assets

Planning Act 2008 – Section 89 and The Infrastructure Planning (Examination Procedure) Rules 2010

Deadline 1 – Written Representation

The Maritime and Coastguard Agency (MCA) is an Executive Agency of the Department for Transport and is responsible throughout the UK for implementing and developing the UK Government's maritime safety and environmental protection policy. This includes co-ordinating maritime Search and Rescue (SAR) through His Majesty's Coastguard 24 hours a day, and checking that ships meet UK and international safety rules. The MCA works to prevent the loss of lives on the coast and at sea, to ensure that vessels are safe, and to prevent coastal pollution. The UK Technical Services Navigation Branch is responsible for UK radiocommunication and navigation policy. This primarily covers SOLAS Convention (Safety of Life at Sea Convention 1974, as amended) Chapters IV and V; the COLREG Convention (International Regulations for Preventing Collisions at Sea 1972, as amended); and the ITU Convention (International Telecommunications Convention 1932, as amended).

The Navigation Risk Assessment (NRA), the Shipping and Navigation chapter of the Environmental Impact Report and draft DCO have been reviewed and we would like to comment as follows:

5.1.14 Volume 5 - Chapter 14 -Shipping and Navigation (APP-051) and
5.2.14.1 Volume 5 - Appendix 14.1 - Navigation Risk Assessment (APP-073)

Morecambe Offshore Windfarm Limited has undertaken a detailed Navigation Risk Assessment (NRA) in accordance with MCA guidance MGN (Marine Guidance Note) 654 and NRA risk assessment methodology. We are satisfied that appropriate traffic data has been collected in accordance with MGN654, which includes three 14-day marine vessel traffic surveys in February 2022, July/August 2022, and November/December 2023, supplemented by 12 months of AIS data from both 2019 and 2022. Key and appropriate stakeholders were identified, and the MCA is content that suitable consultation took place via two hazard identification workshops, dedicated meetings

and navigational simulation sessions. A completed MGN654 Checklist has been provided as part of the NRA, and we are content the recommended NRA process has been followed.

1. **Navigable sea room, collision and allision risks**
   Following extensive consultation from the applicant with key stakeholders which included a multi-day HAZID workshop and navigational simulation exercises to assess the affect the development may have on shipping, in particular ferry routes, some navigational safety risks were found to be unacceptable. This led to a decision by the applicant to reduce the western boundary to increase the sea room for the ferry routes. Through further assessment and consultation, including additional bridge simulation exercises and a second HAZID workshop, the refined Red Line Boundary and risk controls reduced the perceived collision and allisions risk to tolerable levels.

2. **Shipping and Navigation Mitigation Measures**
   The list of applied (embedded) risk controls in Table 12 of the NRA and adopted additional risk controls in Table 45 of the NRA, are appropriate for reducing safety risks to As Low As Reasonably Practicable (ALARP).

3. **Layout Design**
   The turbine layout design must be compliant with MGN654 and it will require MCA and Trinity House approval prior to construction to minimise the risks to surface vessels, including rescue boats, and search and rescue aircraft operating within the site. MCA will seek to ensure all structures are aligned in straight rows and columns with a minimum of two lines of orientation. The layout commitment for two lines of orientation are recognised and welcomed for reducing risks to mariners and SAR aircraft.

4. **Marking and Lighting.**
   MCA will seek to ensure the turbine numbering system follows a ‘spreadsheet’ principle and is consistent with other windfarms in the UK. All lighting and marking arrangements will need to be agreed with MCA and Trinity House. The MCA requires all aviation lighting to be visible 360° and compatible with night vision imaging systems, as detailed in CAP 764 and MGN654 Annex 5.

5. **Emergency Response and Search and Rescue.**
   There is an expectation that the presence of wind farms will increase the likelihood of the requirement for emergency response, not just from navigational incidents but from other incidents such as medical evacuation or pollution. A SAR checklist based on the requirements in MGN654 Annex 5 will need to be completed in agreement with MCA before construction starts. This will include the requirement for an approved Emergency Response Co-operation Plan (ERCoP).

   The NRA outlines the most likely incidents which may result in a required emergency response though does not fully consider the additional demand likely caused by the presence of personnel offshore, as has been experienced from some other windfarms of comparable size. Since the operations and maintenance strategy is not yet clear or the type of vessels utilised (e.g. crew transfer vessels or service operations vessels), it is difficult to determine what resource and capability will be on site and what the availability of this will be at this stage. There may be situations requiring a SAR response where project vessels are unavailable due to weather or crew rotation etc. It should be noted that the presence of a windfarm diminishes the SAR capability and even with an MGN654 compliant layout, there

are still no guarantees of an effective SAR response and therefore consideration should be given as to how the windfarm will mitigate this reduction.

During SAR discussions, particular consideration will need to be given to the implications of the site size and location. Attention should be paid to the level of radar surveillance, AIS and shore-based VHF radio coverage and give due consideration for appropriate mitigation such as radar, AIS receivers and in-field, Marine Band VHF radio communications aerial(s) (VHF voice with Digital Selective Calling (DSC)) that can cover the entire wind farm site and surrounding areas. It would have been helpful for the NRA to consider radio reception interference caused by larger turbines; however we would expect radio surveys to be conducted pre-construction and post-construction to confirm and compare levels of coverage. It will also be expected to discuss the provision of AIS and VHF capability to the MCA with direct access to HM Coastguard systems.

There are 1300 charted wrecks in the study area which could pose a risk of releasing pollution over time and this may require an environmental response. Within the boundaries of a windfarm, emergency response becomes more complex and this must be considered in the Marine Pollution Contingency Plan.

6. **Construction scenarios.**
We would expect to see some form of linear progression of the construction programme avoiding disparate construction sites across the development area, and the consent needs to include the requirement for an agreed construction plan to be in place ahead of any works commencing.

7. **Cable Routes.**
Cable routes, cable burial protection index and cable protection are issues that are yet to be fully developed. However due cognisance needs to address cable burial and protection, particularly close to shore where impacts on navigable water depth may become significant. Any consented cable protection works must ensure existing and future safe navigation is not compromised. If cable protection measures are required e.g., rock bags or concrete mattresses, the MCA would accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum. This will be particularly relevant where depths are decreasing towards shore and potential impacts on navigable water increase.

Should HVDC cables be installed, consideration must be given to the effect of electromagnetic deviation on ships' compasses. The MCA would be willing to accept a three-degree deviation for 95% of the cable route. For the remaining 5% of the cable route no more than five degrees will be attained. We would expect the applicant undertake a desk based compass deviation study based on the specifications of the cable lay proposed and assess the effect of EMF on ship’s compasses. MCA may request for a deviation survey post cable installation which will confirm conformity with the consent condition. The applicant should then provide this data to UKHO via a hydrographic note (H102), as they may want a precautionary notation on the appropriate Admiralty Charts (actions at a later stage depending upon the desk-based study and post installation deviation survey).

8. **Safety Zones.**
The requirement and use of safety zones as detailed in the application is noted, and MCA will comment on the safety zone application once submitted. Safety zones during the construction, maintenance and decommissioning phases are supported. A detailed justification would be required for a 50m operational safety zone, with significant evidence

from the construction phase in addition to the baseline NRA required supporting the case. Safety zones triggered by a Service Operation Vessel connecting to a wind turbine will not be supported.

9. **Cumulative impacts**
   We welcome the further work by the project in regard to the Cumulative Regional Navigation Risk Assessment (CRNRA). MCA concerns raised in response to the PEIR dated 31 May 2023 regarding the cumulative impacts of the neighbouring Mona and Morgan windfarms have been addressed by the boundary changes. We are content that these changes have resulted in the unacceptable safety risks identified in the section 42 response being reduced to '*Medium Risk – Tolerable if ALARP'*.

   There remains a concern that the in-combination effects of the Mona, Morgan, Morecambe and Mooir Vannin offshore wind farms will have significant impacts to ferry operations in the Irish Sea. Whilst this is more of a commercial issue MCA is an executive agency of the Department for Transport and we are concerned with the economic impacts on the nationally and internationally important ferry routes in the Irish Sea and whether these services will remain commercially viable with the necessary deviations.

3.1 Volume 3 - Draft Development Consent Order (APP-012)

MCA contact details in Schedule 6 Part 1 should be amended to:

Maritime and Coastguard Agency
UK Technical Services Navigation
Spring Place
105 Commercial Road
Southampton
SO15 1EG
Email: navigationsafety@mcga.gov.uk

Schedule 6 Part 2:

- Condition 18(1) must include the following additional sub-paragraphs:
  - *latitude and longitude coordinates of the centre point of the location for each wind turbine generator, offshore platform, substation, booster station and meteorological mast; provided as Geographical Information System data referenced to WGS84 datum*.
  - *latitude and longitude coordinates of the inter array cables; provided as Geographical Information System data referenced to WGS84 datum*.

- There does not appear to be a condition where agreed micro-siting distances are confirmed. To provide consistency with the licence conditions for the Mona and Morgan offshore wind farms, MCA would be content with 50m for micro-siting and 5m for tolerance.

The comments detailed above are to highlight areas of concern, and items to be addressed by the applicant in consultation with the MCA and navigation stakeholders to ensure the risk to the safety of navigation and the impact on SAR capability remains low.

Yours faithfully,

[redacted]

[redacted]
Offshore Renewables Lead
UK Technical Services Navigation

[redacted]

[redacted]
Offshore Energy Lead
HM Coastguard Governance, Policy, Standards and International