Maritime and Coastguard Agency
UK Technical Services Navigation
105 Commercial Road
Southampton
SO15 1EG
www.gov.uk/mca

National Infrastructure Planning
Temple Quay House
2 The Square
Bristol, BS1 6PN

2 October 2024

Your ref: EN010136
MCA registration number: 20048863

Dear Sir/Madam

Application by Morgan Offshore Wind Limited for an Order Granting Development Consent for the Morgan 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:

F4.7.1 Environmental Statement Volume 4, Annex 7.1 Navigation Risk Assessment (APP-060) and F2.7 Environmental Statement Volume 2, Chapter 7 Shipping and Navigation (APP-025).

Morgan Offshore Wind 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 four 14-day marine vessel traffic surveys in November 2021, July 2022, May 2023 and November 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 northern boundary to increase the sea room between Morgan and Walney wind farms to 4.3NM at its narrowest point. The northern boundary of Mona was also amended to increase the space between Morgan and Mona to 6NM. 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 1.9 of the NRA and adopted additional risk controls in Table 1.42 of the NRA, are appropriate for reducing safety risks to As Low As Reasonably Practicable (ALARP).

   It should be noted that the requirement for an Emergency Response Cooperation Plan (ERCoP), as referenced in Table 7.17 of the ES Chapter 7 Shipping and Navigation, will be secured in the Deemed Marine Licence under the condition for complying with MGN654. There will not be a specific condition for the completion of an ERCoP.

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 principles in F1.3 Environmental Statement - Volume 1, Chapter 3 Project Description (APP-010) for two lines of orientation and a minimum 1400m spacing between structures (NRA paragraph 1.8.9.3) 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.

Paragraph 1.5.4.4 (and 4.4.3.1.1 of the CRNRA) confirms that SOLAS obligations require vessels to respond to persons or vessels in distress. It should be noted that vessels should only respond if they are safely able to do so and the presence of turbines may preclude the vessel's ability to safely respond to those in distress.

Paragraph 1.8.9.4 summarises helicopter response times and it should be noted that tasking times are likely quicker that the 30-minute approximation although it is longer between the hours of 2200 and 0800.

The CRNRA identifies 1300 charted wrecks in the cumulative 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.

Additional minor comments on F6.7.1 Environmental Statement Volume 6, Annex 7.1 Navigation Risk Assessment (APP-098):

Document	Section	Comment
F4.7.1 Environmental Statement Volume 4, Annex 7.1 Navigation Risk Assessment (APP-060)	Table 1.1	The NPS EN-3 paragraph references need correcting e.g. 2.8.178 should read 2.8.168 and 2.8.179 should read 2.8.169 etc.
	1.8.10.1	The ERCoP facilitates information sharing between the OWF and HMCG.
	1.9.3.6	Risks are defined as Broadly Acceptable, Tolerable (if ALARP), and Unacceptable or Intolerable.
	1.5.4.1 & CRNRA 4.4.1.1.1	Coastguard Operations Centres (CGOC) have been replaced by Maritime Rescue Coordination Centres (MRCC).

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 Morecambe windfarms have been addressed by the boundary changes as referred to in 1.10.1.7. 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'*, as stated in 1.11.1.19.

   However, the proposed Mooir Vannin in Isle of Man waters would reduce the sea space between the southern boundary and northern boundary of Morgan to 2.6NM. A separate assessment has been conducted and included in the CRNRA as Appendix D which concludes that collision and allision risks would be unacceptable, particularly for the passenger route between Heysham and Douglas. It is noted that the scoping report for Mooir Vannin was issued in October 2023 and the planning timeline is behind the planning timeline

for Morgan. We would expect Morgan and Mooir Vannin to reach agreement for increasing the sea space between the two sites to ensure the navigation risks are tolerable.

There also 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.

C1 Draft Development Consent Order (APP-005)

MCA contact details in Schedules 3 and 4 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

Schedules 3 and 4, Part 2:

- Condition 15(7)(a) should be amended to "*at least 14 days prior to commencement…*", as per the standard notification period to Kingfisher Information Service.

- Condition 15(8) should be amended to "*…local notification to mariners is issued at least 14 days…*", as per the standard notification period for notifications.

- Condition 20(a)(ii) allows for up to 125m turbine or platform micrositing which is a significant increase from the standard 50m. Such an increase has not been discussed and is a concern to MCA as there are potential impacts on SAR access and operations.

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]

Nick Salter
Offshore Renewables Lead
UK Technical Services Navigation

[redacted]

Peter Lowson
Offshore Energy Lead
HM Coastguard Governance, Policy, Standards and International