Defence Infrastructure Organisation

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[redacted]

Application Ref: EN010137

Our Reference: DIO10055142

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

06 August 2024

Dear Caroline,

Mona Offshore Wind Limited (the Applicant) encloses an application for an Order granting development consent (the Application) pursuant to section 37 of the Planning Act 2008 (the 2008 Act).

I write to provide the current Ministry of Defence (MOD) position with regard to the application for an order granting development consent for the Mona Offshore Wind Project.

The Defence Infrastructure Organisation (DIO) Safeguarding Team represents the MOD as a consultee in UK planning and energy consenting systems to ensure that development does not compromise or degrade the operation of defence sites such as aerodromes, explosives storage sites, air weapon ranges, and technical sites or training resources such as the Military Low Flying System.

The proposed development would comprise up to 96 wind turbines, each with a maximum height to blade tip of up to 364 metres above Lowest Astronomical Tide (LAT), the development would be located approximately 28.2km from the north coast of Wales. Offshore infrastructure would include up to 360 km of offshore export cables, 50 km of interconnector cables and 325 km of inter-array cables. The onshore infrastructure would consist of up to four circuits. The cables would be buried in up to four trenches and would connect to an onshore High Voltage Alternating Current (HVAC) substation (the Onshore Substation). From the Onshore Substation, a 400kV Grid Connection Corridor will extend to the Bodelwyddan National Grid substation.

The principal concerns of the MOD with respect to this proposed wind farm relate to the impact of the development on the operation and capability of air traffic control radar systems, and the potential to create a physical obstruction to air traffic movements.

At this time the MOD must **object** to the proposed development on the basis that the scheme would have a significant and detrimental impact on the effective operation and capability of air traffic control radar deployed at BAE Warton.

Air Traffic Control (ATC) Radar

The turbines would be 61.5 km from, detectable by, and would cause unacceptable interference to the ATC radar used by BAE Warton.

Wind turbines have been shown to have detrimental effects on the performance of Primary Surveillance Radars. These effects include the desensitisation of radar in the vicinity of the turbines, shadowing and the creation of "unwanted" aircraft returns which air traffic controllers must treat as aircraft returns. The desensitisation of radar could result in aircraft not being detected by the radar and therefore not presented to air traffic controllers. Controllers use the radar to separate and sequence both military and civilian aircraft, and in busy uncontrolled airspace radar is the only sure way to do this safely. Maintaining situational awareness of all aircraft movements within the airspace is crucial to achieving a safe and efficient air traffic service, and the integrity of radar data is central to this process. The creation of "unwanted" returns displayed on the radar leads to increased workload for both controllers and aircrews. Furthermore, real aircraft returns can be obscured by a turbine's radar return, making the tracking of both conflicting unknown aircraft and the controllers' own traffic much more difficult.

Our assessments have determined that, when operational, the proposed wind farm would cause unacceptable and unmanageable interference to the effective operation of air traffic control radar deployed at BAE Warton.

Physical Obstruction

In this case the development falls within Low Flying Area 17 (LFA 17). Within these areas fixed wing aircraft may operate as low as 250 feet or 76.2 metres above ground level to conduct low level flight training. The addition of turbines in this location would introduce a physical obstruction to low flying aircraft operating in the area.

In the event that the applicant is able to overcome the objections listed above, MOD would require that conditions are added to any consent issued requiring the submission, approval and implementation of an aviation lighting scheme, and that sufficient data is submitted to ensure that structures can be accurately charted to allow deconfliction. The applicant has acknowledged the MOD requirement for MOD accredited aviation safety lighting in table 1.16 in Volume 4, Chapter 1, Aviation and Radar of the Offshore Environmental Statement (February 2024).

For the avoidance of any doubt, MOD **objects** to the proposal on the grounds of the unacceptable impact that the development would have on:

- air traffic control radar system sited at BAE Warton.

The MOD continues to work with the applicant to produce a statement of common ground which will be submitted in due course.

I trust this adequately explains our position on this matter.

Yours faithfully,

[redacted]

Stefany Alves Veronese
Assistant Safeguarding Manager