

Technical Appendix 15.2: Civil Aviation Authority (CAA) Response to WFLFAC Aviation Lighting Assessment Report

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29 September 2025
Ref Windfarms / Bhlaraidh Extension

Dear Mike,

Proposed Obstacle Lighting Scheme for Bhlaraidh Extension Wind Farm

Reference: Bhlaraidh Extension Wind Farm Lighting Report dated 2 September 2025

1. Thank you for the lighting report at reference. The report refers to an extension to the existing Bhlaraidh wind farm, located 3km northwest of Invermoriston on the northern banks of Loch Ness.
2. The extension proposal is for 15 turbines at 230m tip height, which brings the turbines within scope of the Air Navigation Order (ANO) Article 222 obstacle lighting requirements.
3. We have considered the report carefully and take note of the intent to address concerns relating to adverse visual impacts of aviation lighting on non-aviation receptors while ensuring that the lighting installed on the turbines meets air safety requirements. Due to the height of the turbines, aviation obstacle visible lighting is required. However, we do not accept the 3-light visible lighting scheme proposal as it provides insufficient definition of the perimeter of the turbines.
4. We accept the 5-light visible lighting scheme proposal and note that some mitigation is proposed to be provided by the provision of infra-red lighting for those operators who carry Night Vision Device capability.

5. Under provisions given in the Air Navigation Order (ANO) Article 222 section 6, the CAA provides for the following variation:

- medium intensity steady red (2000 candela) lights on the nacelles of turbines T02, T05, T06, T09 and T17;
- a second 2000 candela light on the nacelles of the above turbines to act as alternates in the event of a failure of the main light (note that both lights should not be lit at the same time);
- the lights on these turbines to be capable of being dimmed to 10% of peak intensity when the lowest visibility as measured at suitable points around the wind farm by visibility measuring devices exceeds 5km;
- infra-red lights to MoD specification installed on the nacelles of turbines T01, T02, T03, T04, T05, T06, T07, T08, T09, T10, T11, T12, T15, T16 and T17 (note that dimming permission is applicable only to visible lights, not infra-red lighting).

6. Intermediate level 32 candela lights are not required to be fitted on the turbine towers.

7. If the proposed design of the wind farm changes (other than variations due to micro-siting etc.) this is likely to require a revision to this aviation obstacle lighting variation.

Yours sincerely,



Andy Wells
Manager Aviation and Wind Turbine Policy