





PART OF 岩SLR

Proposed Turbine Location

Site Boundary

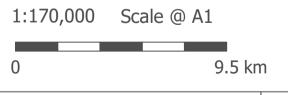
10km Radii
45km Study Area

Not

1. Reduced intensity turbine lighting (200cd) based on 'Air Navigation Order 2016 (CAP393) Article 223 (8)' which allows the 2000cd turbine light to be 'reduced to not less than 10% of the minimum peak intensity specified' i.e. 200cd 'if visibility in all directions from every wind turbine generator in a group is more than 5km'.

Local Authority Boundary

- 2. The lighting intensity for each of the vertical angles shown is based on information provided by an aviation warning light bulb manufacturer.
- 3. Perception of theoretical candela intensity does not take account of distance.
- 4. ZTV calculations do not take into account surface features such as forestry or buildings.
- 5. ZTV calculations for turbine lighting intensity based on visible aviation lighting mounted on the turbine hub.
- 6. The ZTV calculates the degree of vertical angle from the study area shown to each of the proposed Development turbines.
- 7. ZTV calculations represent a worst case situation where predicted lighting intensity may be as a result of only one turbine in the layout.
- 8. No landform within the study area is above 2 degrees from the height of the turbine lighting.
- 9. In accordance with ICAO requirements, no light emission is required above the vertical angle of 2°. Accordingly the ZTV shading cuts off at +2°. It is possible that some areas of landform may project above this angle and theoretically may experience some light emissions. The degree to which light emissions above 2° are constrained will depend on individual light fitting design. This diagram assumes that light intensity will drop away quickly from 2000 cd above 2° from the horizontal.





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ZTV of Turbine Hub Lighting Figure 6.15

Cloud Hill Wind Farm LVIA Report