



NAVIGABLE AIRSPACE DETERMINATION: Mercury Energy- Wind Farm near Turitea, Palmerston North

PURSUANT TO Rule Part 77 of the Civil Aviation Rules I, Sean Turangarau Kere Rogers, Manager Aeronautical Services, having received from Mercury Energy, notification of intention to construct a Wind Farm near Turitea, Palmerston North, conducted an aeronautical study in consultation with such persons, representatives and organisations as I considered appropriate.

After completing the aeronautical study, I am satisfied that the proposed action, if executed, could constitute a hazard in navigable airspace.

THEREFORE I HEREBY ISSUE a

DETERMINATION OF HAZARD IN NAVIGABLE AIRSPACE

in respect of the above notification.

The following conditions are specific to this Determination:

1. The wind turbines shall be lit with appropriate obstacle lights in accordance with an agreed lighting plan meeting the applicable aspects of the CAA Lighting and Marking of Wind Farm Turbines Policy, International Civil Aviation Organisation Annex 14 and Civil Aviation Rule Part 77, Appendix B as follows;
 - a. The highest turbines, those at the extremities of the site, and other turbines around the perimeter of the site will be lit to enable pilots to identify the extent of the windfarm. The spacing between lit turbines will not exceed 900m along the perimeter, and the flashing should be coordinated between all the lights in the wind farm so that they flash simultaneously.
 - b. Lighting will be medium intensity red as defined in Rule Part 77, Appendix B10, i.e. an effective intensity of not less than 1600 candela of red light, and will flash between 20 and 60 times per minute.
 - c. The obstruction lights shall be located on or above the top of the nacelle, shall be visible from all directions, and may be shielded below the horizontal plane.
 - d. The painting of turbines with obstruction marking will not be required. The rotor blades, nacelle and upper 2/3 of the supporting mast of wind turbines should be painted white; and
2. Mercury Energy Ltd are to provide details of the Wind Turbine locations to Aeropath for inclusion in the relevant aeronautical charts and for publication of the revised Minimum Safe Altitude for Instrument Flight Procedure H467; and
3. Mercury Energy Ltd shall liaise with the New Zealand Defence Force to ensure that the lighting types are compatible with the use of aeronautical Night Vision devices; and

The provisions of this determination are in addition to and not in derogation of the provisions of any other Act, or any orders or regulations made thereunder.

4. Mercury Energy Ltd are to promulgate an appropriate NOTAM and/or AIP supplement during the wind farm construction, and provide a temporary lighting solution if any turbine is erected outside a 900m radius of a previously lit area once any turbine structure or associated lifting crane structure is above 60m AGL; and
5. Mercury Energy Ltd are to notify CAA NZ within seven days once the wind turbine construction begins, and once the construction of all turbines with associated compliant lighting/markings is complete.

This Determination of Hazard shall become final on 10 July 2020 unless a petition for review is received by the Director prior to that date.

This Determination of Hazard shall not expire but may be revoked, in writing, by the Director.

Dated at Wellington this 15th day of June 2020.

Sean Turangarau Kere Rogers
Manager Aeronautical Services