

60958684

NAVIGABLE AIRSPACE DETERMINATION: Contact Energy Limited – Wind Farm at 650 Velnaw Road, Oware, Southland

<u>PURSUANT TO</u> Rule Part 77 of the Civil Aviation Rules I, Sean Turangarau Kere Rogers, Manager Aeronautical Services, having received from, Contact Energy Limited notification of intention to construct and operate the Southland Wind Farm, 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 are to be lit with appropriate obstacle lights. Based on the Aviation Assessment conducted by Mike Haines Aviation Limited, the spacing of the turbines is governed by engineering requirements and the terrain constraints of the site. Consequentely, the spacing is such that the guidance of 900m between lit turbines, provided by the CAA Lighting and Marking of Wind Farm Turbines Policy, cannot be achieved. Therefore, all the turbines are to be lit, as follows:
 - a. All the turbines will be lit to enable pilots to identify the full extent of the windfarm. The lights will be flashing, which should be coordinated between all the lights in the wind farm so that they flash simultaneously; and
 - Lighting will be medium intensity red as defined in Rule Part 77, Appendix B10, that is an effective intensity of not less than 1600 candela of red light and will flash between 20 and 60 times per minute; 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.

- c. As all the turbines exceed 150m AGL, a secondary back up light is required plus an array of 3 intermediate low intensity lights installed at a distance of half the nacelle height; and
- d. 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; and
- e. 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, or a similar industry accepted colour, so that they are visible to aviators during hours of daylight.
- Prior to construction, Contact Energy Limited is to provide details of the wind turbine locations and erection dates to Aeropath Quote 24/77/35
 (Part77@aeropath.aero) and request the instrument flight procedures (IFP) are adjusted as identified in the Aeropath assessment for this proposal; and
- 3. Upon receipt of the information in (2) above from Contact Energy Limited, Aeropath is to amend the relevant IFPs for this proposal; and
- 4. Contact Energy Limited is to provide CAA (<u>Aeronautical.services@caa.govt.nz</u>) with notice of the wind turbine construction commencing and again when the construction of all turbines with associated compliant lighting/marking is completed; and
- 5. Prior to the wind farm construction, Contact Energy Limited are to promulgate with Aeropath <u>Part77@aeropath.aero</u>) an appropriate NOTAM and/or AIP supplement for situational awareness of aviators and are to comply with the following temporary lighting solutions:
 - a. A red medium intensity light is to be installed and operational on any attendant crane until such time that the permanent light is operational within the area of the turbine (that is either on this turbine or an adjacent turbine).
 - b. A temporary light is to be installed on the turbine nacelle until such time as a permanent light is operational within the area of the turbine.
- 6. Contact Energy Limited is to liaise with the relevant landowners that use aircraft to perform agricultural operations in the vicinity of the wind farm. They are to agree a process to temporarily turn off relevant wind turbines, as required by the aircraft operators.

This Determination of Hazard shall become final on 18 March 2024 unless a petition for review is received by the Director prior to that date.

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.

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

Dated at Wellington this 23th day of February 2024.

ea.

Sean Turangarau Kere Rogers Manager Aeronautical Services