Australian Government
Civil Aviation Safety Authority

AIR NAVIGATION, AIRSPACE AND AERODROMES BRANCH

CASA Ref: F23/23015-4
Your Ref: SSD-59701722 Email of 1/07/2025

Amy Alessi
Department of Planning Housing and Infrastructure
or The Department of Planning and Environment
Submitting through Major Projects portal

Email: amy.alessi@dpie.nsw.gov.au

CASA ASSESSMENT – TCHELERY WIND FARM SSD-59701722

CASA has reviewed the Aviation Impact Assessment (AIA) (Technical Paper 11) by Aviation projects of 27 March 2025 for the proposed Tchelery Wind Farm, 19 kilometres northeast of Moulamein.

- The proposal includes up to 74 Wind Turbine Generators (WTGs) that will be up to 270 m Above Ground Level (AGL) tip height.
- There will be up to 6 wind monitoring towers (up to 185 m AGL). One 110m wind monitoring tower exists.
- The WTGs are located beyond the Obstacle Limitation Surface (OLS) of the nearest certified aerodromes - Balranald Aerodrome (YBRN) and Hay (YHAY) Aerodrome.
- The Airservices Assessment of 15 May 2025 advises that the wind farm will affect air routes W762 and H247and the LSALT between NATYA-TREST for W762 will need to be raised to 2200ft and the LSALT between NATYA-TOBOB for H247 will need to be raised to 2200ft.
- The Aviation Impact Assessment advises that there are two uncertified aerodromes in the vicinity, but no uncertified aerodromes are located within 3 nm of the closest WTG.

This CASA assessment is made in accordance with the *National Airports Safeguarding Framework (Guideline D)* as developed by the Department of Infrastructure, Transport, Regional Development, Communications and the Arts, to provide planning advice to State and Local Planning Authorities.

With regards to Visual Flight Rules (VFR) operations, pilots are permitted to fly as low as 500 ft AGL (ie, terrain). The WTGs will reach up to a maximum height of approximately 270 m (886 ft) AGL.

CASA has no issues with the Aviation Impact Assessment by Aviation Projects. If the recommendations are implemented, the risks to Aviation Safety will be minimised.

CASA acknowledges the impact on the LSALTs described at Section 6.13 of the AIA and the Airservices Assessment. The proponent (or the proponent's Aviation Consultant) should engage with Airservices Australia regarding the changes to LSALTs, before the WTGs have been erected.

CASA agrees with the Assessment Recommendations at Section 6.14 and the Recommendations at Section 11 of the Aviation Impact Assessment.

CASA agrees with Section 7.1, including the 'Extract form NSW Wind Energy Guidelines'.

CASA agrees with Section 7.2, Wind monitoring towers (WMTs) (marking and lighting).

CASA considers the proposed wind farm will be a hazard to aviation safety and recommends that the wind farm is obstacle lit with steady medium-low intensity red obstacle lighting in accordance with the National Airports Safeguarding Framework Guideline D '*Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation'* National Airports Safeguarding Framework Principles and Guidelines (infrastructure.gov.au) and section 9.31 of Part 139 Aerodromes Manual of Standards Part 139 (Aerodromes) Manual of Standards 2019 (legislation.gov.au) (lower level lights on the turbine support columns are not essential).

International standards require 2,000 candela lighting intensity on the nacelle (also recommended in the NASF guideline) and 200 candelas at the mid-point of the turbine mast. CASA recommends that 200 candela as a minimum intensity lighting on the nacelle would suffice (due mainly to the lack of background lighting in the vicinity of the turbines). The obstacle lighting should be monitored to alert the wind farm operator of any outage. CASA is prepared to review a lighting plan that indicates which turbines are proposed to be lit.

As the Aviation Safety regulator, CASA does not consider the visual impact of obstacle lighting on neighbours / homesteads. However, there are mitigations for visual impact such as baffling (as described in the Aviation Impact Assessment Table 15 / Page 73 5. 'Effect of obstacle lighting on neighbours'). The Landscape and Visual Impact Assessment advises: *Shield all AHL within two kilometres from any dwellings. Avoid strobe lighting* (DPE, 2016).

Further to Recommendation 10, and as recommended by the Aerial Application Association of Australia, CASA recommends that the following Australian Standard be considered regarding overhead transmission lines:

- AS 3891.2, Air navigation — Cables and their supporting structures — Marking and safety requirements, Part 2: Low-level aviation operations.

Yours sincerely

David Alder

David Alder
Aerodrome Engineer

23 July 2025