



Australian Government

Civil Aviation Safety Authority

AIR NAVIGATION, AIRSPACE AND AERODROMES

CASA Ref: F17/8039-27

27 August 2021

Mr Steve O'Donoghue
Director Resource Assessments
Energy & Resources | Planning and Assessment | Department of Planning, Industry and Environment
12 Darcy St | Locked Bag 5022 | PARRAMATTA NSW 2124
stephen.odonoghue@planning.nsw.gov.au

Dear Mr O'Donoghue,

Proposed Tallawarra Power Plant

I refer to your email dated 4 August 2021 seeking CASA advice on the most recent Aviation Impact Assessment and the Computational Fluid Dynamics (CFD) modelling results provided by Energy Australia in relation to the proposed Tallawarra power plant.

CASA notes this is a different proposal than the original proposal that CASA commented on previously. CASA considered the new data provided by Energy Australia and their consultants, but this is highly complex CFD modelling relying on a range of assumptions regarding the parameters of the design, meteorological data, and applicable interpretations. Upon review CASA advises that we currently do not have the organic expertise to examine the complex technical aspects or validity of the CFD modelling presented by Energy Australia.

CASA notes that the design is first of type and based on the CFD modelling provided by Energy Australia, the plume rise velocity is expected to be below 6.1ms by 700ft AMSL. Noting the information and conclusions provided in the latest EA report and based on an expectation that the final design and location will not change, CASA confirms it's previous advice that a plume rise velocity lower than 6.1ms by 700ft AMSL regardless of the plant design would achieve an acceptable level of safety for aviation.

CASA advises that the theoretical modelling must be validated using the final design and actual plume data during power plant operation. Any real time outcomes that create a plume velocity greater than 6.1m/s above 700ft AMSL will require further mitigation to achieve an acceptable level of safety for aviation.

Based on the information provided in the CFD modelling report, CASA would have no technical objection to a future design as proposed that would result in a plume rise velocity lower than 6.1ms by 700ft AMSL.

A handwritten signature in black ink, appearing to read 'Andrew Sparrow', with a large, stylized initial 'A'.

Yours faithfully

Andrew Sparrow

Branch Manager, Air Navigation Airspace and Aerodromes