

29 April 2025

Stephen Barry
Planning Director
Office of the NSW Independent Planning Commission
Suite 15.02, Level 15
135 King Street
Sydney NSW 2000

Dear Stephen,

Subject: Valley of the Winds (SSD-10461) (the 'Project') | RFI: Aerial Firefighting

Thank you for your RFI request by email of Thursday 17th April 2025 regarding the Valley of the Winds project and its potential impacts on aerial firefighting capabilities within the wind farm.

ACEN Australia undertook an *Aviation Impact Assessment* (Aviation Projects, 2021) and a *Bushfire Risk Assessment* (Cool Burn, 2022) as part of the Environmental Impact Statement (EIS) for the Valley of the Winds Project. These assessments were to address the Secretary's Environmental Assessment Requirements (SEARs) (SSD-10461) issued on 09 June 2020, which requested that the EIS:

Identify potential hazards and risks associated with bushfires / use of bushfire prone land, including the risks that a wind farm would cause bushfire and any potential impacts on the aerial fighting of bushfires and demonstrate compliance with Planning for Bush Fire Protection 2019.

The assessments found that the potential risks associated with aviation and bushfire were able to adequately managed through the proposed mitigation measures.

Further assessment was subsequently completed in September 2024 regarding potential for impacts to Coolah, Tongy and Turee aerodromes. This assessment concluded that the project would not have any adverse or significant impacts to air safety, subject to the implementation of mitigation measures and administrative controls.

In response to the EIS:

- the NSW Rural Fire Service (NSW RFS) stated that *"The NSW RFS supports the recommendations of the Bush Fire Assessment Report prepared by Cool Burn Fire & Ecology, dated February 2022."*; and
- Fire and Rescue NSW requested an Emergency Response Plan (ERP) be prepared for the site. This commitment has been included within the project mitigation and management measures and included within the Recommended Instrument of Consent (Condition B54 and B55) prepared by the Department of Planning and Infrastructure (DPHI).

The ERP is required to include details of the access provisions for emergency vehicles to utilise project access tracks. This will maximise the benefit to on the ground fire fighting in line with the Australasian Fire and Emergency Services Council (AFAC) position paper on *Wind Farms and Bush Fires Operations* (2018) which identifies that access roads constructed as part of the project may be beneficial to on the ground fire fighting during bushfire events and assist firefighters by:

- providing access to otherwise inaccessible areas;
- serving as a control line;

- creating linear fire breaks; and
- providing staging areas for firefighting in cleared areas.

The AFAC position paper states “*Wind farms may result in aerial firefighting limitations due to aerial obstacles created by wind turbines and meteorological monitoring towers. The bushfire at the Waterloo wind farm demonstrated that if conditions are clear and wind turbines are turned off, wind turbines are clearly visible from aircraft and are not likely to constrain aerial firefighting operations (Clean Energy Council 2017). However, during this event transmission infrastructure, meteorological towers and guy-ropes were difficult to see (Clean Energy Council 2017); this infrastructure does have potential to limit the effectiveness of aerial firefighting operations.*”

Recommendations of the AFAC position paper to address these issues have been incorporated into the project mitigation and management measures and DPHI recommended conditions of consent (Condition B39, B40, B41, B42, B43, B54, B55) .

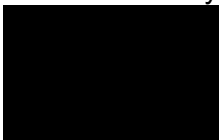
To minimise risks to aviation and maximise both on the ground and aerial fire fighting capability both within and in the vicinity of the wind farm site, ACEN is committed to implementation of the following conditions and will:

- carry out the development in accordance with the **National Airports Safeguarding Framework Guideline D: Managing the Risk to Aviation Safety of Wind Turbine Installations (Wind Farms)/Wind Monitoring Towers**;
- develop an **Aviation Management Plan** in consultation with the operators of Tongy and Turee aerodromes;
- prior to the construction and after installation of any wind turbine or wind monitoring mast **notify CASA, Airservice Australia, Department of Defence and the RAAF** of key information such as location and height;
- prepare a **Fire Safety Study** that meets the requirements of FRNSW;
- implement a range of **fire risk mitigation** during the development of the accommodation camp; and
- develop an **Emergency Plan** including operational procedures in the event of bushfires, such as shutting down turbines and the positioning of turbine blades to minimise interference with aerial firefighting operations and turbining on aviation hazard lighting.

A table of the conditions relevant to the management of aerial and on the ground fire fighting, which are included in the Recommended Instrument of Consent issued by DPHI, are provided in Appendix A.

In summary, the wind farm will not prohibit aerial firefighting from taking place within the project area provided that the appropriate safety measures and emergency planning is in place. The recommended conditions of consent are considered to reasonably manage risk to aircraft during fire fighting activities.

Yours sincerely,



Liam Parnell
Project Developer
ACEN Australia

Appendix A

Table 1: Recommended conditions of Consent relevant to aerial fire

Reference	Condition
B39	<p>Mitigation of Aviation-Related Impacts</p> <p>The Applicant must carry out the development in accordance with the National Airports Safeguarding Framework Guideline D: Managing the Risk to Aviation Safety of Wind Turbine Installations (Wind Farms)/Wind Monitoring Towers, or its latest version, unless the Secretary agrees otherwise.</p>
B40	<p>Aviation Management Plan</p> <p>Prior to commencement of construction, an Aviation Management Plan must be developed by an appropriately qualified expert in aviation safety in consultation with the operators of the Tongy Aerodrome and Turee Aerodrome as identified in the EIS. The Plan must include:</p> <ul style="list-style-type: none"> (a) details of how the construction and operation of wind turbines and wind monitoring masts may impact on aerodrome operations; (B) identification of turbines and wind monitoring masts with the potential to cause a hazard or impact on aerodrome operations, including final coordinates and height details; (c) ongoing consultation with potentially impacted operators; (d) procedures to ensure safe operations of aerodrome runways; and (e) mitigation measures for the management of impacts and hazards to aircraft and aerodrome operations including any recommended restrictions on or variation to standard operating procedures for take-off, landing and flight circuits.
B41, 42 and 43	<p>Notification of Aviation Authorities</p> <p>B41 Prior to the construction of any wind turbine or wind monitoring mast, the Applicant must provide the following information to CASA, Airservices Australia, DoD and the RAAF (together the authorities):</p> <ul style="list-style-type: none"> (a) co-ordinates in latitude and longitude of each wind turbine and mast; (b) the final height of each wind turbine and mast in Australian Height Datum; (c) ground level at the base of each wind turbine and mast in Australian Height Datum; (d) confirmation of compliance with any OLS; and (e) details of any proposed aviation hazard lighting. <p>B42 At least 7 months prior to the construction of turbine MH25, the Applicant must consult with Airservices Australia to secure a commercial agreement for amendments required to air route W-627.</p> <p>B43 Within 30 days of the practical completion of any wind turbine or mast, the Applicant must:</p> <ul style="list-style-type: none"> (a) provide confirmation to the authorities that the information that was previously provided remains accurate; or (b) update the information previously provided.
B46	<p>Fire Safety Study</p> <p>At least one month prior to commencing construction of the battery storage facility, and associated footings/foundations except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Planning Secretary may agree, the Applicant must prepare a Fire Safety Study for the development, to the satisfaction of FRNSW and the Planning.</p> <p>Construction of the battery storage facility and associated footings/foundations (except for construction of those preliminary works that are outside the scope of the hazard studies) must not commence until the Fire Safety Study meets the requirements of FRNSW and approval has been given by the Planning Secretary. The study must:</p>

Reference	Condition
	<ul style="list-style-type: none"> (a) be consistent with the Department's Hazardous Industry Planning and Advisory Paper No. 2 'Fire Safety Study' guideline; and FRNSW Fire Safety Guideline Technical Information – Large scale external lithium-ion battery energy storage systems – Fire safety study considerations; (b) describe the final design of the battery storage facility; include reasonable worst-case bush fire scenario to and from the battery storage and the associated fire management; (c) identify measures to eliminate the expansion of any fire incident, including: <ul style="list-style-type: none"> i. adequate fire safety systems and appropriate water supply; ii. separation and/or compartmentalisation of battery units; and iii. strategies and incident control measures specific to the battery storage design. <p>Following approval by the Planning Secretary, the Applicant must implement the measures described in the Fire Safety Study.</p> <p>Note: 'meets the requirements of FRNSW' above means confirmation in writing from FRNSW that the Study meets the requirements of FRNSW as required by the Department's Hazardous Industry Planning and Advisory Paper No. 2 'Fire Safety Study' guideline.</p>
B53	<p>Operating Conditions – Accommodation Camp</p> <p>For the accommodation camp, the Applicant must:</p> <ul style="list-style-type: none"> (a) minimise the fire risks of the development, including managing vegetation fuel loads on-site; (b) ensure that the development: <ul style="list-style-type: none"> i. complies with the relevant asset protection requirements in the RFS's <i>Planning for Bushfire Protection 2019</i> (or equivalent) and Standards for Asset Protection Zones; ii. internal roads and utilities are provided in accordance with the requirements of the bushfire risk report produced by Cool Burn Pty Ltd, dated 3 February 2022; iii. includes a defensible space around the perimeter of a minimum 10 metres that permits unobstructed vehicle access; and iv. is managed as an asset protection zone (including the defensible space); (c) assist the RFS, FRNSW and emergency services as much as practicable if there is a fire in the vicinity of the site; and (d) notify the relevant local emergency management committee following completion of construction of the development, and prior to commencing operations.
B54	<p>Emergency Plan</p> <p>Prior to commencing construction of the wind farm (including the accommodation camp) and commissioning of the battery storage, the Applicant must develop and implement a comprehensive Emergency Plan and detailed emergency procedures for the development, including an evacuation plan for the accommodation camp, in consultation with RFS and the owner of the Central Ranges High Pressure Gas Transmission Pipeline, and provide a copy of the plan to the local Fire Control Centre and FRNSW. The plan must:</p> <ul style="list-style-type: none"> (a) be prepared in accordance with the findings of the Fire Safety Study required under Condition B46; (b) be consistent with the Department's Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning' and RFS's <i>Planning for Bushfire Protection 2019</i> (or equivalent); (c) be consistent with the NSW RFS document: <i>A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan</i>; (d) include details on how the battery storage and sub-systems can be safely isolated in an emergency; (e) identify the fire risks and hazards and detailed measures for the development to prevent fires igniting;

Reference	Condition
	<p>(f) include availability of fire suppression equipment, access and water; detail access provisions for emergency vehicles and contact details for both a primary and alternative site contact who may be reached 24/7 in the event of an emergency;</p> <p>(g) include procedures for the storage and maintenance of any flammable materials; include bushfire emergency management planning, including:</p> <ul style="list-style-type: none"> i. details of the location, management and maintenance of the Asset Protection Zone and on-site water supply tanks; ii. a list of works that should not be carried out during a total fire ban; iii. details of the access provisions for emergency vehicles and contact details for both a primary and alternative site contact who may be reached 24/7 in the event of an emergency; iv. details of how RFS would be notified, and procedures that would be implemented, in the event that: <ul style="list-style-type: none"> • there is a fire on-site or in the vicinity of the site; • there are any activities on site that would have the potential to ignite surrounding vegetation; or • there are any proposed activities to be carried out during a bushfire danger period; and v. detail specific response measures in the case of flood to ensure site safety vi. describe the specific emergency exit routes to be used in the case of flood and include evidence of access agreements with relevant landowners (e.g. right of carriageway); vii. include an Emergency Services Information Package in accordance with Emergency Services information and tactical fire plan (FRNSW, 2019) to the satisfaction of FRNSW and RFS; and viii. operational procedures in the event of bushfires, such as shutting down turbines and the positioning of turbine blades to minimise interference with aerial firefighting operations and turning on aviation hazard lighting.
B55	<p>Emergency Plan</p> <p>The Applicant must:</p> <ul style="list-style-type: none"> (a) implement the Emergency Plan and Emergency Services Information Package for the duration of the development; and (b) following commencement of commissioning of the battery storage, keep two copies of the Emergency Plan and Emergency Services Information Package on-site in a prominent position adjacent to the site entry points at all times.