

Cc/Bcc:

Subject: Thunderbolt Windfarm additional material from Catherine Woof, Balmoral, Bendemeer

Dear Commissioners,

I object to the proposal. In this extra material I will provide evidence that the presence of wind turbines will impede firefighting operations and access to water from the Banalasta dam.

The presence of turbines will intensify local atmospheric instability.

The farm has experienced a number of mini tornadoes. After the first from a WNW direction, a phone call to the Moree weather station meteorologist confirmed Balmoral was in a tornado prone area.



A damaging small tornado occurred on 30th December 2020 from the north. It passed between the house and shearing shed and tore part of the roof of the shed, turned to the east, picked up a dog kennel and dropped it in a gully below the house, crossed the New England Hwy just south of Uralla then went on to Enmore to damage another shed.

The weather was still, warm and dry and it came out of the blue. Other smaller whirlwinds have tracked north south and south north in similar weather but at different times.

I'm not suggesting this will necessarily happen during aerial firefighting, but it indicates unpredictable, fairly severe turbulence in the locality that will be worsened by surrounding wind turbines.

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In late September 2020 a fully loaded aerial super spreading plane working on an adjacent property in still conditions at about 9am nearly collided with the hillside after unexpected local turbulence affected control of his craft. He manoeuvred around the power lines and banked steeply. I saw it happen and in a phone call he gave the details above.

Afterwards he flew half loaded. He is an experienced pilot who has worked on this property before.

Rotating turbine blades cause turbulence, as do turbines in lockdown. The latter will minimise turbulence, bot not eliminate it. The turbine still is an obstacle.

That aerial firefighting will be impeded is referenced in the Aviation Products report in the EIS.

Specifically, they state that 'in all likelihood' aerial agricultural



Impeded is referenced in the Aviation Products report in the EIS.
Specifically, they state that 'in all likelihood' aerial agricultural operations will be prevented on the windfarm and compromised on neighbouring properties.'

They then somewhat contradict themselves in writing 'any further consultation with local aerial operators ... operations would still be possible.' The reasons for this significant change are not given.

Regardless, the inference is clear.

Aerial firefighting will be impeded.

The flying conditions during bushfires will be very different from the conditions for aerial agriculture.

Considering the number and positions of real historic fires, this conclusion is weak at best.

In a letter dated 7th February 2022 to



How much would this be more so when aerial firefighting in rugged country in less than ideal conditions!

'AusALPA is most concerned about the way in which developers and their agents and consultants broadly trivialise turbulence created by human intervention in the natural environment.'

The AFAC guideline 2018 referred to in the aviation report and by Neoen stated on page 2:

'Windfarms are not expected to adversely affect fire behaviour, nor create major ignition risks'.

On what data are these 'expectations' based?

Turbines dry out the ground (Wang et al, 2023, cited in my previous submission)



In a letter dated 7th February 2022 to the Honourable Richard Wynne, MP, the Minister for Planning in the Victorian Government, from the Australian Airline Pilots Association, the following is a quotation:

'We strongly recommend that DEWLP be very careful about placing too much weight on safety and operational risk advice from the usual collection of consultants paid to make the proponents case over the advice of the professional association of aerial application operators.'

There is a big difference between safely operating aircraft in the vicinity of natural obstacles that others constrain where agricultural activities may reasonably be conducted and managing the risk in the presence of 230m manmade obstacles superimposed on otherwise unconstrained agricultural land.'



Turbines dry out the ground (Wang et al, 2023, cited in my previous submission)

Turbines create turbulence, even in lockdown

Aerial agricultural operations will be affected

...hence alterations in fire behaviour around and in a windfarm are to be expected.

Another AFAC statement:

'Given that windfarms can attract lightning.... It is possible that wind turbines may reduce the risk...'

This statement only underscores the uncertainty and lack of real evidence to support their expectation that it would be business as usual in a windfarm fire. Given that turbines 23.24, 24 and 28 are sited in steep.



This is so different from conditions in this locality. During a severe fire season there won't be 200 volunteers and there may not be any aircraft. The array would not be linear, the country far more rugged and fairly inaccessible below 23, 24 and 25. It is vegetated with tall trees on a dry northwest ridge. The situation at Waterloo can be dismissed as irrelevant, but the use of it in this application shows how little thought and real consultation took place.

In conclusion, I urge the Commission to consider the material in this submission together with details provided by Mr Johnston. Ready access to water for firefighting for smaller blocks on the drier areas below the east west ridge to the north of the proposed windfarm along the Balala Road will be impeded. Likewise, properties along the New England Hwy will be



I would prefer denial of this application. Alternatively, please consider removal of 23,24,25 and 28 as potentially causing too much risk to residents and firefighters.

The approval of such a development with so poorly substantiated conclusions that will affect the safety of volunteers working on a large privately held installation needs also to be thought about in the context that it could pave the way for many more approvals in high fire risk areas like this.

Respectfully submitted

Catherine Woof



windfarm fire. Given that turbines 23,24, 24 and 28 are sited in steep, hire fire prone areas, intercepting a flightpath for helicopters from the Banalasta dam to fires along the north ridge and more densely populated Balala Rd, and turbines intervene between this dam and the more densely populated area along the New England Hwy, I need more substantial support for these hedged statements using conditional words, 'may, possible, expectation'.

People's lives, homes and livelihoods deserve more than the above statements. Ground crew need assurances that they will have aerial backup in this kind of country.

Please consider Mr Stephen
Johnston's detailed map in relation to
the quotations.

The AFAC document references the



The AFAC document references the 2017 Waterloo Farm fire as support for successful aerial firefighting around turbines.

These turbines are in a linear array running north south
The topography is undulating grassland
200, yes, TWO HUNDRED, CFS volunteers attended
There were 2 aircraft
The winds at westerly and northwesterly were in front of the turbines
The air was clear

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