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24th May 2022

Director – Energy Assessments
Development Assessment
Department of Planning and Environment
Locked Bag 5022
Parramatta NSW 2124

Dear Sir/Madam,

Re Thunderbolt Wind Farm SSD-18087896

I write to **object** to the Thunderbolt Wind Farm Stage 1. Reasons for my objections are expanded below, and my submission is supported by the following attachment:

1. Expert Noise Report by L Huson & Associates - Consultant Scientist in Acoustics.

Noise and vibration

My home will be impacted to the west by the proposed Stage 1 development. This will be unbearable compared to the quiet rural tranquility of the landscape I currently enjoy. If Stage 2 proceeds my home will also be impacted to the north and east. And then there is the cumulative noise impact from the numerous other New England proposed wind factories.

Noise is known to travel for many kilometres beyond the boundary of a wind 'factory' in a tunnel like fashion, impacting residences many kilometres away. At my previous residence, we had a small wind turbine (Rutland 914i Wind Turbine) with a blade diameter of less than a metre, this could be heard from a distance of 2 kilometres or more away.

In the specific case of large-scale wind factories, audible noise and infrasound have negative impacts well beyond property boundaries. On 25 March 2022 the Victorian Supreme Court issued a judgment on the Bald Hills Wind Farm nuisance proceedings in *Uren v Bald Hills Wind Farm*, and it was held that operational noise from the Bald Hills Wind Farm was causing a nuisance to local residents, and ordered the operator to stop causing nuisance from wind turbine noise at night and implement noise abatement measures.

I am a very light sleeper and also experience motion sickness, and I fear that the noise and vibration from a large scale wind 'factory' would dramatically impact on my health, well being and destroy the quality of life I currently enjoy. This fear is not unfounded, in the attached report the expert acoustic consultant states, the approach taken by Neon to the Noise Assessment are 'unusual' due to many of the technical "issues ... (are to) be considered after approval of the EIS.' This consultant, L Huson & Associates, was an expert witness in noise assessments associated with the Bald Hills Wind Farm Supreme Court Case, and comments as follows:

It is unusual for an EIS, that *must* include 'completed technical studies, including an accurate noise impact assessment for relevant dwellings undertaken consistent with the requirements of the Noise Assessment Bulletin', to state that the wind turbine layout, the turbine type, the consideration of other matters such as tonality, low frequency noise and sound power levels can all change and are issues that will be considered *after* approval of the EIS.

Further, the expert report comments there is no mention of any cumulative noise impact and vibration effects assessment of the adjoining Winterbourne Wind Farm:-

The body of the EIS suggests that cumulative effects of the Winterbourne Wind Farm have been addressed yet there is no mention in the Sonus report of any cumulative noise impact assessment.

I would also like to know, if the cumulative noise impact effects of Stage 2 of this proposal have been assessed?

L Huson also raises concerns over wind speed measurements, the adequacy of sound level measurement equipment, derived target noise limits ,assumptions for maximum wind speed and notes there is noise model deficiencies, to list a few other issues with the assessment. Also, highlighted is the omission for sensitivity analysis of alternative layouts and alternative turbines!

In summary L Huson's expert acoustic review summarises Neoen's noise assessment to be non-compliant and incomplete. This expert assessment raises grave concerns over the aptitude of Neoen to ensure an adequate and complete assessment of potential noise impacts for this development.

Biodiversity

Most of the trees in the proposed area are classified as high-value koala habitat species. Koalas were found during the biodiversity survey of the site. The area is home to the endangered Bells Turtle and other various identified threatened and declining woodland bird species. Indeed, the Neoen Biodiversity Development Assessment Report identifies a significant number of endangered and threatened species. The turbine installation and road construction will involve clearing many trees and shrubs in high value biodiversity areas.

Omitted from the Biodiversity Assessment Report is the Bogong Moth, another threatened species. Bogong moths migrate through the Kentucky district a couple of times a year. Bogong Moths were declared Threatened by the Commonwealth Government in 2000. In December last year the IUCN (International Union for Conservation of Nature) added the Bogong Moth to the international red list of threatened and endangered species.

The Neoen EIS fails to assess the impact of wildlife movements between the development site, and biodiverse areas or migration routes. It would be very likely the turbines would adversely affect the migration of the bogong moth. The Bogong moth's population rapidly declining population and this impact on other species should concern every Australian, as we all depend on the interconnected web of nature.

The site for the proposed development has been ill-conceived, its biodiversity value is irreplaceable and the site should not be considered as appropriate for a large-scale wind 'factory'.

Conclusion

This development will be the start of turning the beautiful, biodiverse rich Kentucky district into a large scale industrial zone; impacting endangered ecosystems and wildlife, land values, local amenity, along with a raft of other negative impacts. This will adversely change the district for a very long time, if not forever, due to it being very likely the gigantic 270+ m turbines will be left in situ at the end of life, and may well become abandoned engineering structures.

I am pro renewable energy but the 'green' benefits of large industrial wind factories (they are not farms!!) are dubious at best, and the long term negative impacts signify how unsuitable they are as 'green' renewable energy option. I call on the NSW Government to dismiss outright the Thunderbolt Wind Farm Stage 1 proposal. Large scale wind turbine factories are not fit for purpose in NSW rural areas.

Yours sincerely,

Tess Dawson

Attachments

1. Thunderbolt Wind Farm - Stage 1 EIS Review, L Huon & Associated Pty Ltd