Submission No 171

INQUIRY INTO FEASIBILITY OF UNDERGROUNDING THE TRANSMISSION INFRASTRUCTURE FOR RENEWABLE ENERGY PROJECTS

Name: Mr Bill Johnson

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13 July 2023

The Hon. Emily Suvaal,
Committee Chair,
Inquiry - Feasibility of undergrounding the
transmission infrastructure for renewable energy projects
Standing Committee on State Development
Parliament House
6 Macquarie Street
SYDNEY NSW 2000

Dear Committee Members,

I write in support of proposals to place the HumeLink transmission line underground.

We own a 121Ha property at Bannister, NSW, which we run in conjunction with a larger property nearby. We derive 100% of our income from the farm enterprise.

An existing 330kv line transects the southern corner of the property. Transgrid's HumeLink 500kv line will be to the north of this original line, closer to and within 450m of our house.

We support greater use of renewables in power generation, and recognise that transmission infrastructure needs to be upgraded. However, we see Transgrid's current overhead HumeLink negates many of the environmental gains, and threatens our ability to farm sustainably. We believe the conclusion by Transgrid that undergrounding HumeLink was economically unviable failed to address many of the hidden costs of the proposed overhead transmission line.

Our main concerns with the HumeLink overhead project are:

- Interfere with our ability to offset emissions in our grazing enterprise
- Loss of biodiversity, both on our farm, and landscape
- Destruction of visual amenity, both on our farm, and district
- Erosion of land value far in excess of compensation
- Compromised fire fighting
- Increased risk of fires

Interfere with our ability to offset emissions in our grazing enterprise

Ironically, HumeLink is needed to help Australia to meet net zero emissions targets. But the proposed overhead line will annihilate an entire patch of remnant native vegetation on our property, vegetation key to us demonstrating net zero emissions in our grazing enterprise.

When we purchased the old potato growing property 26 years ago, there were few trees. We identified a patch of significant remnant native vegetation adjacent to the existing 330kv powerline, which we fenced off. We have made a substantial investment in this area, totally excluding grazing for the entire 26 years. Importantly, many new tree seedlings have emerged below the dense canopy of diverse, mature eucalypts.

This area was intended to help substantiate our future claim to net zero emissions from our farm. The Transgrid overhead HumeLink will clear the entire stand of trees, shrubs and grasses.

By placing the transmission line underground, it would not be necessary for the line to continue in a dead straight line. It would be possible to avoid this highly valuable vegetation altogether, by altering the line of the easement by only a few metres. If a slight deviation in direction is deemed impractical, the width of the easement for undergrounding could be reduced compared to the full 70m required for the overhead line. If it was placed underground using a narrower easement immediately adjacent to the existing powerline, a substantial number of trees would be saved.

Putting the line underground through our property would greatly reduce the physical cost of clearing, the carbon emissions from removing and disposing of so many mature trees, and the cost to Transgrid from having to purchase biodiversity offsets. It would also greatly enhance our ability to meet future net zero for our own enterprise. The antiquated scheme by which compensation is paid to landholders affected by HumeLink fails to recognise the importance of the farm trees and vegetation it will destroy, and the substantial conservation efforts taken over many years by owners such as ourselves to preserve them.

This century-old eucalypt on our property, and dozens more beside it, will be annihilated by HumeLink overhead. It could be preserved if HumeLink was placed underground.

Loss of biodiversity, both on our farm, and landscape

The patch of remnant native vegetation described above, which will be removed to make way for HumeLink overhead, but which may be substantially preserved by placing HumeLink underground, contains at least seven tree species, including one found nowhere else on our property. This species, on the edge of the 70m overhead easement, would not need to be lost from the area, if Humelink was underground. It is absurd that Transgrid could buy say 100,000 acres of hopbush scrub at Enngonia, to offset destruction of century old eucalypts on the tablelands for the overhead line. Surely the better choice is an option that preserves the greater amount of biodiversity in situ.

Destruction of visual amenity, both on our farm, and district

The Bannister district straddles the Great Dividing Range, and has immense natural beauty, stunning sunrises and sunsets, and views to the horizon. At 945m altitude, our property is one of the highest in the district. To spoil these vistas with 80m high towers each supporting 24 conductors would be hideous. The existing line, with towers less than half that height, is more in proportion with the existing tree species; the proposed overhead line would dominate the landscape, as it cut a wide swathe through existing and planted tree lines.

Erosion of land value far in excess of compensation

First impressions are key to buying a property. The HumeLink overhead powerline will always be “in the face” of potential buyers. And for a significant proportion of the population, there remains uncertainty about the medical safety of electromagnetic radiation from such high voltage overhead lines. It is a difficult argument to refute if you’ve ever stood underneath, especially during rain. Given the option, buyers would totally avoid a property transected by overhead HumeLink.

Compromised fire fighting

During periods of extreme fire danger, Rural Fire Service policy prefers rapid deployment of aerial fire fighting appliances, to attempt to quickly contain fires. Such aircraft will not operate in the vicinity of the proposed overhead powerline. With official predictions that periods of fire danger will become more extreme and for longer, the proposed overhead powerline will threaten the safety of residents and the livelihoods of landholders by interfering with bushfire suppression activities.

Increased risk of fires

A large proportion of the most devastating bushfires in southeastern Australia in recent decades have been caused by powerlines. CSIRO predicts increasing severity of adverse weather conditions, both longer drier weather, and more intense storms with stronger winds. A windstorm in 2022 flattened several steel electricity pylons northeast of Yass. The Bannister district has been chosen as a preferred site for wind turbines for power generation, based on the strength and frequency of wind; any climate-induced increase in intensity of this wind will put the proposed HumeLink overhead line at high risk for starting a bushfire.

Conclusion

We would prefer HumeLink to be built somewhere else entirely. But if it must come through Bannister, it’s impact, both immediate and for generations, would be less if it was underground. There has been little consideration given to the environmental and business costs outlined above in Transgrid’s dismissal of the underground option. These costs are not only relevant to our property,

but to the hundreds of properties in HumeLink's path. When all the hidden costs of the overhead transmission line are taken into account, placing HumeLink underground is by far a cheaper option.

Australians have trenched a high-pressure gas pipeline underground from Moomba in South Australia to Sydney, a distance of 1300km, TWICE, with numerous additional offshoots to regional towns and cities. It didn't require a 70m-wide swathe to be bulldozed through the landscape. In fact, many people driving past the underground pipeline would be unaware of its existence. Contrast that to the proposed HumeLink overhead line!

Australians have buried a fibre-optic cable the length of the east coast. The technology exists for entrepreneurs to have considered sending solar electricity generated in Katherine NT to Singapore. Transgrid itself has placed high voltage powerlines underground in Sydney.

We have the technology and the skills in Australia to place HumeLink underground – we just need the political will and the foresight to make it happen. We owe it to the environment that our grandkids will inherit to ensure it does.

Bill Johnson
For WD&A Johnson