

Submission
No 237

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

Name: Name suppressed

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Confidential

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The Hon Emily Suvaal, MLC, Committee Chair
STANDING COMMITTEE ON STATE DEVELOPMENT
Parliament House
6 Macquarie Street
SYDNEY NSW 2000

Dear Ms Suvaal

Thank you for the opportunity to make a submission to this important inquiry into the feasibility of undergrounding transmission infrastructure for renewable infrastructure projects.

My family has been living and farming in the Tumut & Adelong area for over 180 years. We operate a polled hereford cattle stud, founded by my grandfather and a sheep stud, founded by my mother. We also run commercial cattle and sheep herds, with total numbers of around 3000 sheep and 800 cattle.

As long-term residents since the 1830s, we have a proven and enduring relationship and attachment to our land. We are committed to environmental sustainability and repair, particularly the elimination of noxious weeds and introduced pests, erosion control & repair, and the ethical treatment of animals. I am proud to say that all three of my sons aspire to follow in the footsteps of their grandparents and continue the family agricultural business, as the 7th generation of local farmers. This is a rare thing in this age of globalisation, economic rationalism, and uncertainty.

The proposed Humelink project route is a 70-metre, 30.5-hectare corridor, running four and a half kilometres long, right through the middle of our property. We currently have 10 towers for the 330 kV line and have been told we are likely to have an additional 11 new 500kV towers in an adjacent easement. Despite ongoing engagement since 2020 with TransGrid, discussion of the level of impact, and suggestions of overhead transmission line route options that would have less impact on our property, we have made no progress and remain hideously affected. We strongly encourage that the Humelink line be constructed underground.

My major concerns about overhead transmission lines include:

BushFire

Our property is in a high bushfire risk zone. We are only a few kilometres away from the ignition point of the Dunns Road bushfire, which in the summer of 2019-20 burnt huge areas, destroyed many houses, and killed millions of animals and plants. We were some of the lucky ones, as our property was only partly burnt out, but after three and a half years and hundreds of thousands of dollars, we are still working to repair damaged infrastructure and pastures, all uninsured. Underground power lines would reduce our fire risk and provide no hindrance to safe firefighting. With a massive corridor of above-ground, high-voltage transmission lines across our property, who will come and help us to fight a bushfire and contain it before it gets out of control, and who will stand back and watch it all burn? It will probably be just myself, my children, my siblings, and my aging parents out there, risking our safety by ourselves, as we would not be able to stand by and watch our life stock perish and the whole place burn.

Visual and Environmental Impacts on our Property of Undergrounding

Constructing HumeLink with underground transmission infrastructure will reduce the multiple environmental impacts on our property in comparison to overhead infrastructure. While there will still

be impacts, there will be a significantly reduced impact on biodiversity as a much smaller easement is required. There should be at least a 75-80 reduction in the removal of trees and plants, as the easement for underground lines is only approximately 12-15 metres, compared to the 70m easement required for overhead lines.

Our land is a mix of flat and undulating land with picturesque steep hills and valleys. Especially on the hills, the soils are ancient and fragile, supporting native vegetation and trees, and with little to no topsoil. The soils are very delicate and subject to severe erosion or landslip if disturbed. The current route for HumeLink is right across some of these steep areas, through the creek right next to our household water supply point, and through our most successful native vegetation preservation tree lot area.

We are very concerned about the end results of the construction of the compacted working pads of 70 metres x 50 metres at each pylon location, especially in the steep terrain and woodland areas. Each of the 11 leveled and compacted working pads will be 3500 square metres, carved out of the earth. Especially on the steep, erosion, and landslip prone hillsides. That's not something you can rehabilitate, no matter what the TransGrid brochures say about dilapidation reports, stockpiling topsoil, restoration, and stabilisation.

Putting the transmission lines underground removes the need for such huge areas to be cleared to allow for the construction of towers. Undergrounding may also make it possible to locate the lines in flatter, more accessible terrain than is currently planned. This could reduce construction costs and potentially increase the chances of successful rehabilitation of the easement through navigation around vulnerable areas. Underground construction lowers the risk of interruptions to power transmission in severe weather events and/or bushfires, which improves transmission security and resilience.

The current proposal will destroy multiple standing eucalypt trees some up to 300 years old, and remove valuable and much-needed shade and shelter trees from the lower paddocks. Undergrounding would allow many of these to be saved and have much less impact on the landscape and visual amenity

Impacts on the Agricultural Operation on our Property of Undergrounding and Industrialisation of the Rural Landscape

Undergrounding would almost eliminate the impact from the transmission lines on the visual and rural landscape. Given the planned route and the height of the 80+ meter high towers, an overhead transmission line would be clearly visible from all parts of the property, looming over us as we work. It would run quite close to the house, meaning that as well as spending most of the days outdoors near the line, there is also the possibility of exposure during the night.

Undergrounding would also reduce electromagnetic field impacts, reducing possible health risks. And would reduce interruption to precision agriculture technologies that are currently improving the productivity, efficiency, and safety of agriculture. Undergrounding would significantly reduce interference with agricultural, machinery use, drones or aircraft operations such as fertilizer spreading and control of exotic weeds such as thistles and Patterson's curse. The owner of the business who has been carrying out the aerial work for us for many years has estimated that the proposed location and height of the new overhead powerline would make his work more dangerous, increase the cost to at least three times the current rate, and be less effective.

Existing case studies and current projects domestic and international

In Australia, many private companies are putting transmission underground, including Marinus Link, the Star of the South project, and Murraylink. TransGrid has almost finished building the 20km underground 300 kV underground project, Powering Sydney's Future: Potts Hill to Alexandria transmission line. International projects include the massive SuedLink and SuedOstLink 525kV lines in Germany, which at a total of 1250 km really dwarf HumeLink. The state of California is laying 10,000 miles of underground powerlines to reduce wildfire risk, saying that they cannot afford not to put build them underground. If undergrounding can be done successfully in these cases, it can be done for HumeLink.

Impact of Underground Construction on delivery timeframes

TransGrid has argued that underground construction of HumeLink would not be feasible because it would cause unacceptable delays to project deadlines, including a failure to be ready for the July 2025 completion of the Snowy 2.0 project. But AEMO modeling has suggested that the optimal timing for HumeLink completion was 2028-29 in one scenario, and 2033-34 in a separate scenario. Moreover, it has since been announced that Snowy 2.0 has been delayed by at least four and a half years, until at least December 2029. While construction of underground transmission infrastructure can take longer in some respects, this significant change in the time frame means the excuse of project completion imperative is no longer valid. TransGrid will have enough time to deliver

The Costs and Benefits of Undergrounding

The visual and physical desecration of the landscape by the construction of overhead transmission lines such as HumeLink cannot be underestimated. The value and liveability of our property will not be affected if the lines are placed underground. The benefits to the environment and communities of getting the construction of major infrastructure "right" will last for generations. And if we get it wrong we will ALL be paying one way or another for a long time. Sometimes we only get one shot at doing things properly and if it is really a worthwhile, once-in-a-generation project, it's worth doing it well.

Although a lot of time and money has been spent this far, pushing Snowy 2.0 and HumeLink as an overhead project, the project really needs to be critically assessed, it does not seem to add up. It's better to call off the wedding beforehand, even on the day, once you find out your fiancé/ fiancée is not what you thought they were. Even if you already have the dress, the church, and the venue, and even if all the invitations have been sent out, it's still best to look honestly at the situation and abandon the whole project if required.

If you don't, it's going to cost more and cause more misery to everyone in the long run. The NSW government still has the opportunity to break off the engagement and cancel the wedding between the people of NSW and HumeLink. Please don't waste this opportunity.

We recognise the importance of renewable, clean energy and the need for infrastructure to support its transmission. But we need your help to negotiate better short- and long-term options for local businesses, communities, the environment, and future generations. Underground electricity transmission infrastructure is the best practice around the world. I urge you to support undergrounding HumeLink so that my family and I, our neighbours, our business, and the people of NSW are not casualties, as our state and country transition to a low-carbon energy future.

Regards