

**Submission
No 23**

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

Name: Ms Robin Quilty

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Robin Quilty

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

Dear Ms Suvaal,

INQUIRY – Feasibility of undergrounding the transmission infrastructure for renewable energy projects

We are a grazing business running cattle and sheep, food production for Australians and for export overseas. The current HumeLink overhead transmission lines route is through the middle of our property and within 400m of our home and the centre of our business. Our major concerns about this include:

- [Fire Risk & Fighting Fires](#)
- [Environmental & Agricultural Impacts](#)
- [Visual Amenity & Industrialisation of Landscape & Future Duplication of Lines](#)
- [Loss of Value / Income](#)
- [Potential Health Problems](#)

Fire Risk & Fighting Fires

Undergrounding lines makes our land much more accessible for fighting fires; it is almost impossible to fight fires where there are overhead power lines both from the safety of the fire fighters and for aircraft if brought in for fire-fighting. In fact, fire-fighting regulations say it is a “NO GO ZONE” under power lines because of arcing from lines to ground even when the power is switched off as there is still residual power in the lines.

Having fought the Dunn’s Road fire day and night for two weeks in 2019-2020, and with help of family and friends we managed to save half our property and all our livestock, and from which we are still recovering, we are so aware of the HORROR of fires and the cost to us, the environment, the people, and animals. The consequences of that fire have been huge and some of the damage to the land will never be recovered from; as well as loss of native animals, and the trauma experienced by the people who experienced that fire will remain with us forever. So, we DO NOT WANT CONTINUING FIRES WHICH WILL CAUSE IRREPARABLE DAMAGE.

Environmental & Agricultural Impacts

Our agricultural land, into which our family has poured work, money, and love for nearly 70 years will be much harder to work with overhead transmission lines, both with looking after our animals, aerial access for fertilising and spraying, and the erosion which will be caused by the disturbance of the ground during construction.

The landscape here is hilly and the ancient soils are very fragile: easily eroded and impossible to restore. This has been demonstrated recently with the damage caused by the fires and the massive erosion of land and waterways. There is a huge cost to trying to rectify such damage, which can never be fully restored. If HumeLink was built underground, the route could be adjusted to flatter areas of the property, where the construction impacts could be more easily controlled and long-term effects minimised.

The European Union has restrictions regarding European livestock that have grazed within 100 metres of overhead transmission lines. While at this point the EU has not enforced these for Australian producers, if this changes we and other local producers will not be able to sell our produce in that market as we currently do.

Not only our income will be reduced but also much needed export income for Australia. With underground transmission lines, this risk can be mitigated.

Visual Amenity & Industrialisation of Landscape & Future Duplication of Lines

We already have one 300 kV transmission line on our property which is an eyesore, as well as the ongoing damage caused by its installation. The increased industrialising of our landscape from an additional 500 kV transmission line, two to three times as tall will be awful. We have been told that Snowy Hydro is planning the construction of two similarly sized, overhead transmission lines, most likely located to duplicate the HumeLink route. A scenario of up to four high voltage transmission lines, cutting a 300m swathe across our land is just incomprehensible. Undergrounding is the only feasible option for HumeLink and any subsequent duplication.

Loss of Value / Income

The construction of high voltage overhead transmission lines significantly devalues agricultural properties, by 30-50%. In this area, some property vendors have had buyers back off from the sale, when they heard these big towers were going to be built near or across the sale property. If they go underground, transmission lines will have a lesser effect on the value of the property.

Potential Health Problems

Health problems in people living close to overhead powerlines have been reported in studies from across the world. While additional research is needed to determine the long-term effects of electromagnetic fields (EMF) on humans beyond doubt, we are very concerned about the risk of harm to our family and employees who live and work beside and under the transmission lines on a daily basis. As the HumeLink route passes within 400m of our house and business administration centre and runs four and a half kilometres through the centre of our property, it is impossible to avoid proximity to it. If the transmission lines were put underground, the risk of harm from EMF would decrease.

I think there will be a much bigger cost to Australia than has been allowed for by TransGrid, and politicians, as the consequences of overhead lines become more apparent. Countries overseas are undergrounding their electricity lines as they say the future consequent costs of towers are much higher than undergrounding. Costs not factored in to cost of overhead transmission lines (compared to underground) lives of people, wildlife, reduced production, reduced business activity due to visual pollution, economic harm, disturbances to communications. The true and total costs need to be used when overhead or underground transmission lines are compared.

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 is best practice around the world. We urge you to support undergrounding HumeLink so that we and the people of NSW are not casualties as we transition to a low carbon energy future.

Regards

NAME