

**Submission  
No 214**

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

**Name:** Mr William Reynolds

**Date Received:** 14 July 2023

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*William Reynolds*

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

14 July 2023

Dear The Hon Emily Suvaal MLC,

**Re: Feasibility of undergrounding the transmission infrastructure for renewable energy projects**

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

I am directly and indirectly affected to the transmission lines in 4 different areas along the Humelink proposed line. I am a father to 4 girls and I am a 4<sup>th</sup> generation farmer and work on my family farm in the Yaven Creek area.

My main points for your consideration,

- **Bushfire Concerns** – I am current volunteering as deputy captain for Darlow Fire Brigade which I live and work, we were directly impacted in the 2019/20 Dunns Road fire, where we lost 95% of our family farm and lost hundreds of head of livestock and countless amounts of trees shrubs.

Data shows that the bushfire risk is getting higher as the temperatures are rising with global warming, making towers and lines even more dangerous

<https://www.csiro.au/en/research/environmental-impacts/climate-change/state-of-the-climate/australias-changing-climate>

Outdated transmission tower technology significantly increases the risk of deadly bushfires and makes it harder to fight them, threatening lives, property and native animals.

Countries overseas are transitioning to net zero emissions by HVDC underground transmission.

Two such projects are listed below:

- Canada to NY 339 miles (546 km), Champlain Hudson Power Express [Canada](#)
- Off Shore North Sea wind/South solar Germany 750km, Suedlink [SuedLink](#)

- Other parts of the world are following best practice by bringing renewable energy into big cities like New York, with HVDC underground, such as the Champlain Hudson Power Express.

Powerlines are also being put underground overseas because of bushfire risk and to transform the natural beauty to places that have had the towers.

- In July 2021, California announced it will bury 10,000 miles of overhead power lines to reduce the risk of wildfires, at a cost of between \$US15 to \$US30 billion. When asked about the cost the CEO said "It's too expensive not to do it. Lives are on the line," [California](#)
- Going Underground- removing overhead to underground to enhance the landscape and to transform the views to show the natural beauty. [England](#)

Further, in Australia, private companies are putting transmission underground.

Two current projects Marinus Link and Star of the South, are being undertaken by private companies, are putting transmission underground.

- Marinus Link, the new interconnector between Tasmania and Victoria, and the first investment for Rewiring the Nation, has 90 km underground.
- Star of the South, Australia's first off shore wind farm, off the coast of Victoria with 2200MW of capacity – more capacity than Snowy 2.0, will have 60-80 km underground.

The reasons given by these companies for undergrounding transmission, when it costs more, are the community, the landscape and the environment benefits.

- **Community concerns** - For some members of our community, the HumeLink proposal has prompted what I call it 'social anxiety' and has caused division in the community, as they fear destruction to their family homes and properties that have been held dearly in their hearts for generations & it has placed stress on members of my family and the community I grew up in.
- **Environmental Concerns** - clearing of bushland and farmland ruining native flora and fauna and the ecosystems they live in while increasing the risk of erosion on farmland that has been looked after for by farmer over the years.
- **Electromagnetic fields (EMF) Concerns**, which French courts recently recognised, are genuine health risks. [example of compensation in France](#).
- **Biosecurity Concerns** – The risks are a huge problem for all of the HumeLink project if the towers are erected or buried, and considerations need to be taking into how the government will manage a huge outbreak of disease if caused from construction of the project. Eg Foot & mouth and Lumpy Skin.

I urge the Standing Committee to recommend that undergrounding is the best way forward for renewable energy transmission in NSW and Australia.

As we transition to net zero emissions we need environmentally responsible transmission as well as generation.

In conclusion, Governments overseas and private companies in Australia have come to the conclusion that when you take into account all the non-market costs of overhead transmission lines (bushfires, biodiversity, visual amenity, regional development, tourism, and agricultural productivity) for the next 80-100 years, undergrounding is the preferred option.

Yours sincerely,

*William Reynolds*