Submission No 27

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

Name: Andrew and Louise Sinca

Date Received: 9 July 2023

AJ & LH SINCA

9 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 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.

We operate a commercial beef cattle enterprise running 100 cows in the Gregadoo area. We currently have 5 towers and will have an additional 5 new 500 kV towers across our farm. We have also been advised that a new substation may be located on our boundary. We don't know because Humelink will not confirm nor deny. This uncertainty has placed considerable stress on our family, our neighbours and future farm regeneration plans. The visual pollution on the landscape of these towers cannot be underestimated.

We strongly encourage the placement of the Humelink line to go underground for the following logical reasons;

a) the costs and benefits of undergrounding

- Humelink would have a "social licence" and our full support to place the line underground
- Undergrounding would reduce our fire risk (Mt Flakney zoned Bushfire Prone Area)
- no restriction or hazard to safe firefighting
- protection of the infrastructure from severe weather and fire events
- undergrounding will not impede our agricultural operations (biosecurity risks)
- no impact on the landscape and amenity

- significantly reduced impact on biodiversity as a much smaller easement is required. The current proposal will destroy at least 20 old standing red gum eucalypt trees and important local wildlife habitat on our farm.
- The benefits to the environment and communities of undergrounding will last for generations.
- The value of our farm will not be affected if the lines are placed underground.

b) existing case studies and current projects domestic and international

If undergrounding can be done overseas with success and integrity it can be done here.

- In Australia, private companies are putting transmission underground.
  - Existing projects
    - Murraylink, 180km
    - Directlink
    - Powering Sydney's Future Project - Transgrid 330kv underground 20km (Potts Hill to Alexandria)
  - Current Australian projects
    - Marinus Link, 90km
    - Star of the South, 60-80km
    -
- International Projects
    - SuedLink, 750km 525kV – renewables Germany
    - SuedOstLink, 500km 525kV
    - California burying 10,000 miles of powerlines to reduce wildfire risk
    - Champlain Hudson Power Express (CHPE), renewables Canada - New York

c) any impact on delivery timeframes

- The community will support and work with the government and Transgrid to assist in any way possible to ensure delivery timetable is met if undergrounding is chosen.

- The planning for HumeLink was done assuming Snowy 2.0 would be available in July 2025. Snowy Hydro has now announced that Snowy 2.0 won't be complete until December 2029. This 4.5 year delay means HumeLink can be delivered when needed as an underground solution.

- AEMO's own modelling, even before significant delays to the completion of Snowy 2.0 were announced, said the optimal timing of HumeLink was 2028-29 in the Step Change scenario; and 2033-34 in Progressive Change scenario.

- If undergrounding HumeLink is rejected, because it will take longer to build, Transgrid will be solely to blame, and must be held to account. Transgrid has been continually working against the community on Undergrounding HumeLink – stalling and misleading government for the last 3 years.

d) environmental impacts of undergrounding

- Greatly reduced environmental impacts in comparison to Overhead infrastructure.
  - Undergrounding will result in at an estimate 15m easement in comparison to a 70m easement with overhead lines;
  - Much reduced removal of trees and plant flora;
  - Reduction in endangered species types being killed. 82 threatened species are impacted by HumeLink;
  - Land above underground cable infrastructure can be rejuvenated after construction;
  - No towers and wires interfering with flight of birds or movement of climbing animals. No bird or climbing animal deaths will result. Thus eliminating concern for protected birds e.g. Wedge tailed eagles.
  - Eliminates the risk of overhead lines causing bushfire. The black summer cost the nation $230 billion and killed almost 3 billion koala, kangaroos and other animals.
  - Eliminates air and ground fire control hazards;
  - Eliminates the risk of interruption to power transmission in severe weather events and/or bushfires and therefore improves transmission security and resilience as required under the SLACIP Act;
  - Minimal impact to private or public land after construction is complete;
  - No overhead lines impeding agricultural operations, machinery use, irrigation, drones, or aircraft operation;
  - No visual impact from the transmission lines and so no loss of visual and rural landscape character of regions;
  - Little to no electromagnetic field impacts. Therefore, less risk of serious health impacts, plus no interruption to new technologies like precision agriculture that improve the productive efficiency of agriculture.

We urge the Standing Committee to recommend that undergrounding is the best way forward for renewable energy transmission in NSW. As we transition to net zero emissions we need environmentally responsible transmission as well as generation.

Yours Sincerely,

Andrew & Louise Sinca