

**Submission
No 64**

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

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Director,
Select Committee on the Feasibility of Undergrounding
Infrastructure for Renewable Energy Projects,
Parliament House,
Macquarie Street,
SYDNEY NSW 2000

Via email: undergrounding.infrastructure@parliament.nsw.gov.au

Dear Sir/Madam,

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

I write to provide you with an additional submission to my previous one dated 13 July, 2023 and to confirm my support of undergrounding the HumeLink transmission line project.

I am a farmer from Yass producing merino sheep for superfine wool. Twenty years ago I inherited the property from my father and have continued his legacy of primary production to benefit the Australian economy. It has at times been very difficult with droughts, other extreme weather events, bushfires and low commodity prices.

The Transgrid HumeLink Project has been flawed from the start and continues to be so which is evidenced in the recent Transgrid HumeLink EIS which has revealed a substantial number of additional impacts and flaws in the planning of the HumeLink overhead transmission line.

Relevant information on the details of the Project, which I should have been provided with by the Transgrid employees who visited my property on several occasions did not happen and I contend that this was negligence on their part.

Some information reluctantly provided by the Transgrid project employees by email on 9 November, 2022 together with two maps attached advised that the transmission line distance from my residence was 360 metres.

In the EIS I discovered that it was only a distance of 269 metres away. Similarly, the distance from my neighbour's residence at 6 Zouch Road, is also misrepresented in the same email at a distance of 351 metres, yet the EIS states 270 metres.

(Attachment A: Two maps provided by Transgrid with incorrect measurements)

Outlined below is a brief summary of the additional impacts on myself and my neighbours which I only discovered from the HumeLink EIS.

1. Environmental Impacts

Transgrid has failed to address the significant ecological impacts the construction of the overhead transmission line will have on the Biodiversity values of the Fairy Hole Creek and other environmentally valuable land. I have offered to share the Biodiversity Assessment Report with Transgrid Project employees but was told that they are "not recognizing any reports done by privately engaged Ecology Experts."

Transgrid have not included any mitigation strategies to decrease the risk of bird collision with the HumeLink overhead transmission lines.

There has been no strategic planning or careful route and corridor development processes done by Transgrid in their Feasibility Study to determine the best location of the proposed 500kV transmission line corridor from the start of the project. It was done by desk top method, naively thinking that they could just parallel the existing 330kV line built some 60 years prior when there was vast open countryside and a very different social, economic and environmental mindset.

The project's technical working group who carried out the desk-top study had neither agricultural nor avian expertise within the group. Therefore, they did not consider sensitive bird habitats, important migratory routes, sensitive nesting and foraging sites and main flight paths of resident species.

One of these species is the Wedge Tail Eagle who frequently visits my property.

Undergrounding the HumeLink transmission line is the only solution to prevent bird deaths occurring.

(Attachment B: Photos of Wedge Tail Eagles foraging at the proposed site of the HumeLink transmission line easement)

2. Negative cumulative impacts

I believe that Transgrid have not done enough impact assessment on this subject. My property is already burdened by a 330kV and 132 kV transmission line.

Currently under construction is the Rye Park Wind Farm in the vicinity of my property and is already highly visible near the Bango Nature Reserve. When operational together with the 330kV line and the proposed 500kV overhead transmission line will exceed noise limits at dwellings enforced by the NSW Environmental Protection Authority (Noise Policy for Industry (EPA 2017).

The EIS identified 'operational transmission line noise impact up to 470 metres from the easement'.

It also said 'the majority of sensitive receivers potentially impacted by operation noise from the project transmission lines are scattered rural residences surrounding the transmission line route'.

This assessment of 'scattered rural residences' as described in the EIS is clearly not true of my area which consists of a large number of residents in close proximity on the Wargeila, Zouch and Fairy Hole Roads which are all within the 2 kilometre impact zone of the HumeLink easement.

Many of whom have not been notified by Transgrid of the impact of the proposed HumeLink Project.

Landscape Character and Visual Impact

Transgrid have assessed my property as having 'moderate' potential visual impact in their Landscape Character and Visual Impact Assessment.

Transgrid have attempted to 'minimize' the impact in their EIS regardless of my dwelling having kitchen, dining and sunroom windows directly facing the proposed directional change strainer transmission tower, 269 metres away on the top of a hill, then diagonally crossing the Buggali Road to ascend another hill with another two 80 metre high towers.

My neighbor at 6 Zouch Road, 270 metres from the transmission line easement has been assessed as having 'no potential moderate or high visual impact' due to 'intervening vegetation'. The fact is that the house at 6 Zouch Road faces directly onto the directional change strainer transmission tower which is considerably larger in base measurement than the non directional change towers.

The 'intervening vegetation' consists of a sparse scattering of eucalyptus trees no more than 10 metres in height along the Wargeila Road, compared to a directional change transmission strainer tower on top of a hill at a height of 80 metres overlooking the residence.

'View Points' selected by Transgrid for assessing the visual and landscape character of the HumeLink Project is not representative of the landscape character zones and has omitted the other impacted properties of 6, 41, 61 Zouch Road and the other residences in the HumeLink Project easement vicinity which have not been included in the assessment at all on Wargeila and Fairy Hole Roads.

3. Noise and Vibration Impacts

My residence has now been identified in the EIS as having a 'brake and winch' pad near the dwelling which will be impacted by 'noise and vibration'.

There is however, no identification in any of the reports of the family cemetery, **my father's grave site** which is also located in the vicinity of the residence.

Nor the large aboveground water storage reservoir which has not been assessed for possible damage caused by construction blasting, or any other impacts from the construction using vibration intensive equipment.

Brake and winch locations have been identified as impacting receivers when they are within 600 metres. Both my residence and 6 Zouch Road are at 269 and 270 metres respectively from the transmission line easement.

Yet both residences are identified by Transgrid as 'moderately intrusive.'

4. Undergrounding the HumeLink transmission lines

The benefits of constructing the HumeLink transmission line underground far outweigh the catastrophic impacts of an overhead transmission construction for the reasons stated below:

- a) Easement reduced from 70 metres for overhead lines to 15 metres wide for underground with the ability to replant vegetation.
- b) Trench depth for underground is 1.5 metres compared to tower footing holes to a depth of 22 metres requiring in some cases blasting or drilling into underground water streams creating a water bore.
- c) Greater scope for variation of transmission route alternative to avoid impacted residents and environmentally sensitive land.
- d) Underground transmission line routes are able to horizontal directional drill for up to 1 kilometre to avoid soil and water crossing impacts.

e) Undergrounding the transmission lines will eliminate the large scale community opposition to the overhead Humelink Project.

f) The independent costing report from Amplitude Consultants has identified in the cost benefit analysis that undergrounding the transmission line would benefit the environment, community and electricity consumers in the long run with lower operational and maintenance costs per annum. Greater security of the transmission infrastructure in bushfire and high wind events.

CONCLUSION

Thank you for giving me the opportunity to voice my concerns about the construction of this critical Humelink Transgrid infrastructure project.

I believe that Transgrid have been in such a hurry to advance their own agenda on the construction of this project using overhead transmission towers and lines that certain mistakes have been made and now this requires correction for the benefit of the Australian community.

Material changes in the higher cost of the construction of the overhead transmission line requires re-evaluation and an accurate comparison between the cost, time and benefits of constructing both underground and overhead transmission lines needs to be re-applied so that the misinformation that has been amplified at various times can be corrected and that the new information can be relied upon by the Government and Regulators to evaluate which would be more beneficial to the whole Australian community and future generations.

Yours sincerely,

Renate Lunardello