

Submission
No 17

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

Name: Name suppressed
Date Received: 3 November 2023

Partially
Confidential

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

02 November 2023

Dear Director, Committee chair,

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

Thank you for the opportunity to make a submission to this critical inquiry. I wish to update my previous submission in support undergrounding transmission infrastructure as a high priority.

After reviewing Transgrid's Humelink EIS, I ask that the below points are considered in addition to my initial submission:

I object to the Humelink overhead 500kv transmission line proposal on a number of issues.

I am a fourth-generation farmer who will be directly impacted by the proposed transmission line **over 3.1km, 70m wide cleared easement, EIGHT TOWERS and lengthy time construction and (unknown) maintenance access roads throughout my property.**

My objections to the Humelink project relate to the following:

- **Lack of Consultation and Inadequate assessment (Ecology and Environment, Cultural and European Heritage)**
- **Assessment in the EIS of the wrong route alignment**
- **Significant adverse visual, environmental, economic, and family succession planning impact**
- **Substantial environmental harm**
- **Failure to consider alternatives with lesser adverse impacts.**

I have with Stephen Noon (who has extensive expertise in High Voltage design and construction, and environmental approvals of substations, transmission lines, power station switchyards and

telecommunication facilities) identified an alternative route through my property with lesser adverse environmental and economic impacts. Mr Noon's report is attached (**Attachment 1**).

Also attached (**Attachment 2, Sections 1, 2 & 3**) are photos I have prepared to demonstrate the improved visual and environmental impact of the alternative route.

See [REFERENCES LAST PAGE: EIS DOCUMENT AND IMPACTS RAPTOR BIRDLIFE](#)

1. Introduction

Cowridge was a portion of the larger original property holding, 'Bellevale,' Yass, settled in the 1850's from (Hamilton)Hume/Barbour family. Cowridge has been farmed by our family for 90 years.

Cowridge is a fine merino wool and meat agricultural business. We take pride in our environmental management and sustainable rotational grazing practices to maximise the best health and productivity for livestock, soil, native and improved pastures.

My children are the 5th generation, our family succession plan offers the best enterprise opportunities to diversify with an eco-tourism business, whilst maintaining a viable and sustainable agricultural business. We have four concessional blocks of land for development.

Cowridge has a fenced off area of **175ha of private conservation land including planted tree line connectivity corridors to waterways. This equates to nearly 30% of landholding protect biodiversity and conservation.** Our family has spent decades restoring and improving habitat for native species (plants and animals). **The original land holding fenced off 45ha, five kilometres** of the 'serpentine aerial view' Yass River protecting the waterway and enhancing a wildlife corridor which is not grazed by livestock. **A further 110ha, private conservation block of land on either side of Derringullen Creek,** is not grazed by livestock with a small portion, 40ha, is managed under restricted and controlled reserve grazing to benefit the native grasses, depending on the seasonal conditions.

The 500kv transmission line (and associated access roads and towers) will slice the 110ha conservation land in two and is proposed to directly impact the waterfall. The proposed 70m wide clearing zones will remove all significant vegetation, impacting habitat connectivity, and creating numerous erosion and invasive weed issues.

The EIS ecology survey is NOT comprehensive, it does not 'paint 'a clear picture of the flora and wildlife corridor connectivity to the waterways, Derringullen and Bowning Creeks and the Yass River. This unique hidden landmark has been under conservation for 40 years. I have received funded monies for environmental projects over many years to secure a viable future for our waterways and wildlife corridors.

Upon reading the EIS, no person would have any idea the Derringullen falls exist. or the rocky outcrops, cliffs, habitat, flora, and fauna that surrounds the falls.

The centre point of the conservation land is Derringullen Falls, not described in the EIS. The falls are within the transmission line easement. The 110ha conservation land is cut in half by the 500kv transmission line. (photo below).

A more environmentally and visually destructive location for the powerlines could not be imagined.



Above - Wedge-tailed Eagles nest.

Mid-point walking track viewing stop.

HIGH VISUAL IMPACT

Potentially standing under Overhead 500kv lines through to horizon, (Centre, right of tree lines)

2. Lack of Consultation and Inadequate assessment (Ecology and Environment, Cultural and European Heritage)

My experience with Transgrid since we were first informed of the proposed line through our property has been highly distressing and caused life changing medical conditions. Communications have been dreadful, at no point have any communications answered our questions truthfully.

The fact, the Transgrid route selected was based on aerial maps and no ground truthing.

I have over the last two/three years unsuccessfully:

- *Requested Transgrid to bring the mapping team, engineer, or surveyor on site to view the significant practical impediments to constructing a powerline in the location proposed.*
- *Requested Transgrid to consider an alternative adjusted alignment, within the original corridor, which would minimise adverse impacts to Agriculture primary production, Ecology and Environment, Cultural and European Heritage, and obvious practical ground site locations crossing the Black Range Road the 132kv 99M transmission line, and the Derringullen Creek.*
- *Sought from Transgrid critical construction information, tower sites and additional property access roads to each tower site.*
- *Information on the results of the ecological /heritage survey undertaken by them.*

I was shocked, extremely upset, and incredibly frustrated when I reviewed the EIS.

Despite two years of “consultation” I am unaware of the nature and extent of proposed impacts, including the proposed access tracks, total clearing zones and hazard clearing zones. *Nor been*

advised of the location of the 8 proposed towers on my land and how heavy vehicle construction access to those sites is proposed.

Until I saw the EIS and worked through the extremely large document (over ten thousand pages, in a limited timeframe) to identify any information specific to my property.

My property is *identified in the Ecology Assessment in the EIS in (EIS REF: DBAR Part 2 Figures 1 of 3 Figure 7-2 Map ref 69,70 –pages 565-566 of 599)*

Based on my families experience of the land, I have significant concerns as to the feasibility of what is proposed on my property.

In relation to the EIS, I note that:

- ***The EIS ecology surveys undertaken by Transgrid are NOT comprehensive.*** Relevant biodiversity assessment has been omitted.
- ***The Derringullen falls is not mentioned,*** the waterfall is central in the surveyed corridor. Reading the EIS surveyed documents you would not know this landmark feature exists.
- No identification of the rock escarpments and cliffs or surrounding the falls landscape.
- Wrong description, the water as turbid. Clearly a notation would have been appropriate, only after heavy rain would this occur.
- The vulnerable Little Eagle has been recorded in the ecology survey but the protected Wedge-Tailed Eagle pair and nesting tree within the 70m easement were not marked on survey maps. It is a certainty, death by electrocution, and will never return to this habitat and hunting grounds. All raptor birdlife connectivity to waterways and landscape are now threatened survival. ([see REFERENCE website articles](#))
- The ancient *Callitris glaucophylla*, unique as it is the only tree of this size, and species on Derringullen Creek, not listed. Estimated over one hundred years of age, a girth of 3.4m.
- ***The neglect of omitting the true value of the biodiverse environment as low to moderate impact is shameful.***
- Clearing multiple 100 -200-year ancient grassy woodland trees -, *Euc melliodora*, *Euc blakelyi* and multi-hollow *Euc. bridgesiana* trees.
- Transmission line potentially over the top of the largest tree on property, *Eucalyptus camaldulensis*- River red gum, estimated 200 years, 8.5m girth
- Clearing multiple young to mature paddock trees, plus over 300 planted tree lines and understorey corridors, connectivity to waterways.
- Damage to vulnerable stability of Rocky cliffs and rocky outcrops and habitat for legless lizards. (not surveyed)
- ***The EIS Fails to honour of the true values of the Aboriginal women's site.*** The visual impact and dominance of towers and lines, and ambience on sensitive waterway location and social impact on protecting, educating, and celebrating this special area.
- Dismisses European History sites as 'insignificant'. The report contains wrong information. ***The reported date of the property ownership is incorrect.*** The well and sheep dip are disappointing survey result. Another small quince tree orchard and rubble house site directly under the transmission line has not been assessed.

- The route has a heavy impact on the neighbours' hollow tree grassy box woodland, 40 - 50 trees, on the Bowning Creek. The vulnerable little eagle is marked on EIS survey and environmental connectivity within properties and on significant waterways.
- **Transgrid could not have chosen a worst-case scenario for many of the assumed tower sites on our property.**
- **All maps drawn on satellite cannot be presented to us without the practical on ground landscape assessments. Before the EIS not after. The EIS document contains many inaccuracies, it appears this information has been withheld from landholders. After our years of requests.**
- **Impracticalities of crossing the 132kv 99M line could not be in a worse location.**
 - The safety issues on the line crossing over on an escarpment and slope without on ground site analysis.
 - The tower location crossing the 99M line seriously impacts our livestock yards, high volume of livestock movements and animal husbandry practices, concerns over EMF and
 - surrounding paddocks lambing paddocks and sheep camps. The paddocks are tree lined for seasonal protection and lambing survival.
 - Transgrid did not advise me, and I have only identified in my review of the EIS and discussions with Stephen Noon that a large portion of tree lines outside the 70 m easement will be totally removed for additional construction constraints due to the larger span across the Black Range Road, deeper footings, and pulley/tensioning on a bend. [Reference map EIS: TR1 Part 2 of 3 Figure 13-1 map reference 69,70 \(pages 195,196 of 905\)](#)
- **Another disastrous tower site next to our 120kL cement above ground water tank, pipelines, and Helicopter pad.** My farm and livestock are irrigated by a gravity fed system of dams, troughs, and pipelines. The helicopter pad is located next to the tank now deemed too dangerous. Impacting land weed management practices impossible to access by land vehicles or by manual hand.

-Comments from Transgrid regarding the Livestock yards and water tank were, "we'll just move it". However, it appears that our critical agricultural infrastructures are now is just on the edge of the easement, so it is 'OUR PROBLEM AND JUST BAD LUCK'.

- **Transgrid have contradicted themselves in the EIS; stating Transgrid will choose the narrowest waterway crossing point. With the lowest impact. This is definitely the opposite case in point. Transgrid have decided to cross the Derringullen Creek, over the widest point a very large span, over a landmark Derringullen Falls.**
- Again, I refer to our preferred re-alignment line where all these issues can be annulled (see attached report of Mr Stephen Noon).

The best solution to avoid these high impact issues is UNDERGROUND TRANSMISSION LINES.

Before any further assessment is undertaken, I request that our alternative line is re-assessed for practical, construction, maintenance and safety issues crossing the following four critical points:

- **at the narrowest point.**
- Crossing the 132kv, 99M Line - open (clear of vegetation) level ground either side of 99M line.

- Crossing the Derringullen Creek at the narrowest point, low ecological impact.
- Crossing the Bowning Creek (neighbours' property) at a lower impacted area.

2. Assessment in the EIS of the wrong route alignment.

The EIS has considered a different transmission line alignment than the one I am now informed is proposed.

The route apparently assessed in the EIS is the November 2022 route. I understand that the 17 April 2023 route is the route currently proposed by Transgrid.

The April 2023 route requires the removal of very substantial (ancient trees), crosses Derringullen Falls at the base of the falls (at its widest extent), is closer to my main water tank and the helipad, will require the removal of more mature habitat trees on my and my neighbour's property.

The 17 April 2023 map Transgrid provided to me with a letter stating:

"We have, however, been able to adjust the alignment to adequately consider the areas you have previously raised in relation to the conservation of cultural heritage, the biodiversity conservation area you are developing and the waterfall on Derringullen Creek".

I completely disagree, it is a disgraceful and insulting response and cannot be justified that the route (as depicted in the April 2023 map) has been adjusted to adequately address, **HIGH VISUAL IMPACT, cultural heritage impacts, devastating impacts on conservation areas flora and fauna, and the landmark feature the Derringullen Falls. NO justified response or adjustments for the above-mentioned critical points.**

The adverse environmental and economic impacts of the 'adjusted' route has not been assessed.

I do not know where the eight towers will be.

I do not know how Transgrid proposes to access the towers for construction and maintenance (as the terrain is difficult for heavy vehicles).

My experience with Transgrid and Humelink project has included:

-stone walling, blunt and total refusal to see practical alternative options- lack of information, -false information, -generic statements, -bordering on bullying tactics to sign the agreements and -constant pressure to beat us down to submission.

Transgrid have not delivered responsibilities of expert consultation, good design, surveyor/engineering and proper on ground land assessment, **before the reduced 70m easement map was issued to us, as landholders, November 2022.**

I may add these key points of dishonesty PRIOR November 2022, WHEN WE RECEIVED THE REDUCED CORRIDOR EASEMENT MAP.

The ecology survey conducted November 2021, ONLY SURVEYED THE REDUCED CORRIDOR - BEFORE OUR KNOWLEDGE OF THE 'FINAL' EASEMENT.

The Compensation agreement document issued July 2022, deadline December 2022, before knowledge of the reduced easement.

And still without any critical information of towers site locations and construction access.

This is completely unacceptable.

New surveys are required. The 'new' route a little further to the south which has EQUALLY HIGH IMPACT.

To note, the new transmission line map April 2023, has INCREASED the environmental destruction of biodiversity connectivity between closely associated waterways, the Derringullen, Bowning and Washpen Creeks, are 500 -600m from the Yass River.

The neighbouring properties to the west, (refer EIS map figure 7-2 Map ref 68 & 69) suffer HIGH IMPACT environmental losses, significant loss of habitat. The advantages of our re-alignment must be considered for reducing overall biodiversity impact and irreversible damages over 3 properties.

3. Significant adverse impact - visual, economic, and family succession planning

The proposed transmission line will have a significant adverse visual impact on the conservation land and our agricultural business generally.

- **Environmental conservation land and protection:** *Our family has long been involved in funded Rivers of Carbon (ARRC) Australian river Restoration Centre, Bowning, Bookham and Yass area Network Land Care, Greening Australia, projects to protect the waterways and connectivity, planted tree lines. Accomplished and achievable long-term projects are adversely impacted.*
- **Eco-tourism opportunities:** *Our family purchased adjoining land (2018) to allow us to diversify with potential Derringullen Walking Tracks and Eco-lodge, to share the beautiful short walks and scenic environment. We commenced works and plans with helicopter application weed control and track development and presented a preliminary DA application to the Yass Valley Council for a small **Eco-Lodge with views across Derringullen Creek.** (On hold pending Humelink project line, will null and void Eco-tourism potential, re-alignment)*
- **HIGH Visual impact, the 500kv transmission line will be a dominant visual structure in the landscape scenery and vistas adverse impact on the eco-tourism enterprise.** *The sections of the walking tracks will be under the wide span transmission line and two towers crossing the Derringullen Creek. HIGH visual impact of seven of the eight towers in the walking track landscape. (Our preferred re-alignment reduces the visual impact. Underground is a clear advantage for long term benefits.)*
- **Subdivision blocks and Land devaluing.** *Entitlements of four subdivision blocks Yass Valley Council, 2007, have been impacted on social, visual impact, noise, EMF, and devaluing. The subdivision blocks will all have a visual impact. The span over Black Range Road, to an escarpment /sheep yards plateau where a tower structure and bend will heavily impact subdivision blocks.*
- **Property devaluing** *is heavily impacted with the 500kv transmission line 'green fields' 75m height, 70 m easement, 3.1km.*
- **Succession family planning,** *over generations strategy plans to retain a viable property and look to the future in diversified business opportunities Impacts children's future inheritance.*

These include the above mentioned, Eco-tourism walking tracks and Eco-lodge farm stays. and entitlements of subdivision small blocks. The visual and social impacts of the proposed overhead transmission line will decimate all of these opportunities.

- ***High lightning strike and Bushfire impact:*** *Unaffordable insurance with a high impact infrastructure crossing our property puts us in a financial hardship and disadvantage. A large portion of my property relies heavily on aerial water bombing in inaccessible terrain unsafe for RFS ground crews. Both land and air offer NILL protection of conservation land and property.*
- ***Concern as stated to expect 'inferior Chinese steel'*** . *Locally Transgrid towers half the size have crumpled in severe weather events.*
- ***AGRICULTURAL IMPACT - Land - Aerial weed spraying – Economic - Animal husbandry – Paddock shade trees and property improvements tree lines – Year-round seasonal protection***
- *Calculated losses and impact from the above mentioned will have long term recovery, some rock levelled towers sites will not recover, we expect years of weeds in construction zones and loss of practical access and ability to control noxious weeds. High Erosion in the vulnerable steep country.*
- *I understand that high voltage transmissions lines produce noise and EMF. The impact of noise created by the lines has not been assessed in the EIS. Transmission line noise will disturb livestock (note a tension tower and the crossing of the Humelink and the 99m (132kV) line is proposed directly over my sheep yards and sheep camps).*

5. Substantial environmental harm

Our family has devoted decades and significant resources to understanding and improving the ecological values of Cowridge. We have benefited from a number of funded projects: -Australian River Restoration Centre (ARRC), Rivers of Carbon Project, Bowning Bookham Landcare, Yass Area Network Landcare- Greening Australia, Birdlife Australia, Birds on Farms project. **We have created a 175ha Cowridge conservation area on significant waterways and Wildlife corridor, equating to nearly 30% of our property.** The Cowridge conservation area inhabits to name a few:

- *Derringullen Creek habitat; (HIGH Connectivity to Bowning Creek and the Yass River)*

Numerous raptor bird population, in threat of electrocution and will never return to this ideal habitat.

Little eagle-Vulnerable. Wedge-tailed Eagle nest pair- protected.

Vulnerable birdlife, Superb Parrot, Scarlet Robin, Occasionally Gang-Gang Cockatoos

- *Contains a high density of native flora, providing unique ecosystem.*
- *Encompasses a culturally significant Aboriginal women's site*
- *Contains (areas of Cowridge) fossil deposits limestone coral, shells, trilobites.*
- **Includes and protects Remnant grassy box woodland – Yellow box, Blakelyi Red gum**
- *Includes one of the many large habitat trees, a Wedge-tailed Eagles nest tree*
- *hidden spring water sink hole, 2 large Springs feeds Derringullen waterway and is part of the wildlife biodiversity.*



Derringullen Falls



-Edge of (but NOT in picture) Ngunnawal Women's Area. Multi-hollowed ancient *Euc bridgesiana*, top of waterfall. Grassy box woodland (top right) Rocky escarpments and habit for flora and fauna.



High viewpoint, Badgerys walking track. Left, Edge of Grassy Box Woodland. Right, hidden waterfall, deep at base of steep terrain.

Potentially standing under 500kv Humelink cutting 110ha conservation land in half.

HIGH VISUAL IMPACT 500kv line through to the right of 'Bald Hill' (centre horizon).

6. Failure to consider alternatives with lesser adverse impacts

The substantial adverse environmental, heritage, economic and social impacts of the Humelink transmission on Cowridge are significant, unique, **are largely avoidable**.

The environmental and economic harm of the Humelink would be largely mitigated if the line were underground.

Transgrid have in my view undertaken no meaningful steps to identify the specific impacts of the line on Cowridge Conservation land or to consider a relatively minor route re-alignment which would shift the crossing of Derringullen Creek upstream to the narrowest part of the waterway. This slight adjustment of the route would be less visually intrusive, easier (level/ stable ground), cause less ecological harm and allow our ecotourism project to proceed.

Transgrid have bluntly disregarded our alternative route crossing the 132kv, 99M Line to a practical level ground area. Clear of vegetation providing higher safety measures would be highly advantageous.

