

Supplementary
Submission
No 51a

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

Name: Mrs Rebecca Tobin

Date Received: 22 March 2024

HUMELINK UNITED
Rebecca Tobin

Correspondence to:

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

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

22nd March 2024

Dear Select Committee,

Re: Supplementary submission to the Select Committee inquiry into the feasibility of undergrounding the transmission infrastructure for renewable energy projects

Please enter this address as a supplementary submission to the inquiry. This address was made to Transgrid at the concluding Community Consultative Group meeting, it is imperative that this address is considered for review.

**Address to the Community Consultative Group Meeting by Rebecca Tobin,
Gundagai, March 19, 2024**

1. CONSULTATION

Public Consultation is defined as ‘a process by which members of the public are asked for input on public issues.’

The CCG is characterised by Transgrid dictating to the community rather than genuine consulting. Consultation should go both ways, but here it does not.

As a member of the CCG since its inception we joined in hope that this would provide a platform for us and our communities to be heard. However, there is no genuine consideration for people, the communities impacted or the environment. There is failure to

listen, failure to respond positively to communities, to better the project as is the requirements of consultation. Therefore, Transgrid has failed in its requirements to consult.

In the EIS Transgrid says that 'success looks like:

- gaining community and stakeholder acceptance to develop and operate Transgrid's electricity network;
- fair, reasonable and timely consultation processes;
- fair robust and transparent route selection; and
- fair and equitable compensation for landowners.'

Based on these statements, there is NO evidence of success.

As we look at the last four years, there is no fairness across the board. All that is seen is the path of Transgrid's destruction even before you build - emotionally, personally, financially, and physically, impacting all in its path. For all those years, we have been agreeable to an undergrounding solution, but the path Transgrid chooses is to defy and subsequently deny communities.

Transgrid has failed to present the facts to the public, hiding the reality, for instance by not using NEARA as a '3D visualisation' tool. Our community has asked to 'see' the destruction of construction and operation, but we are denied any 'real' imagery.

As CCG members, the EIS had us presented with new information that we had never been provided before. As a very recent example, I innocently asked what appears to have been a loaded question, in relation to the EIS stating in some places there would be 110-130m easements. Where would these be? Would this occur on our property? What I did not bank on was these larger easements are where Transpositions occur. As you can see by Figure 1(a) a Transposition is an even greater burden, and industrial impact that has until now been hidden, and quite possibly would have stayed that way until the question was asked. Seven Transpositions will be placed along the 365 km route. At seven locations landowners will be getting two sets of towers, two transmission lines, on their properties. This admission is the last straw and it is certain that this further warrants the need to underground Humelink.

The explanation I was given for the use of Transpositions is ... 'a process of changing the order of conductors along the towers to balance transmission losses over the length of the line'. Interestingly, a strategy to manage the 'losses' that plague overhead AC infrastructure, when in fact experts in HVDC underground have stated all along, and have well documented that undergrounding via HVDC substantially minimises the losses in comparison to overhead. So underground it!

Figure 1(a): Representative Diagram of a Transposition

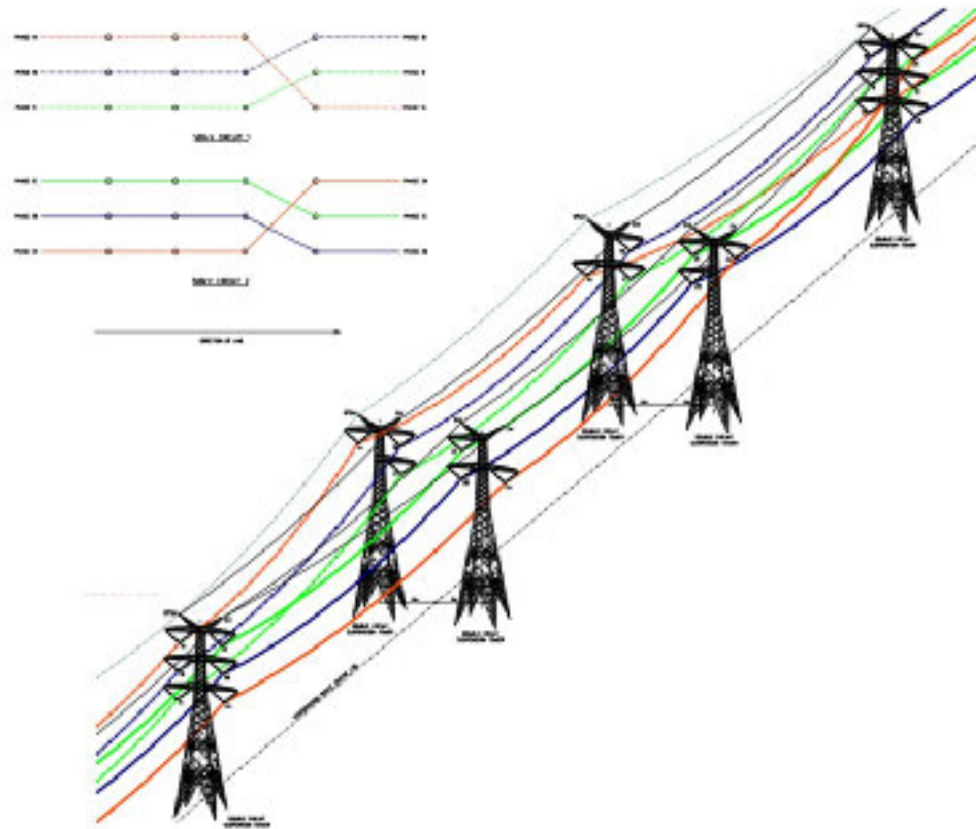


Figure 1(b): Transpositions located on a landowner's property

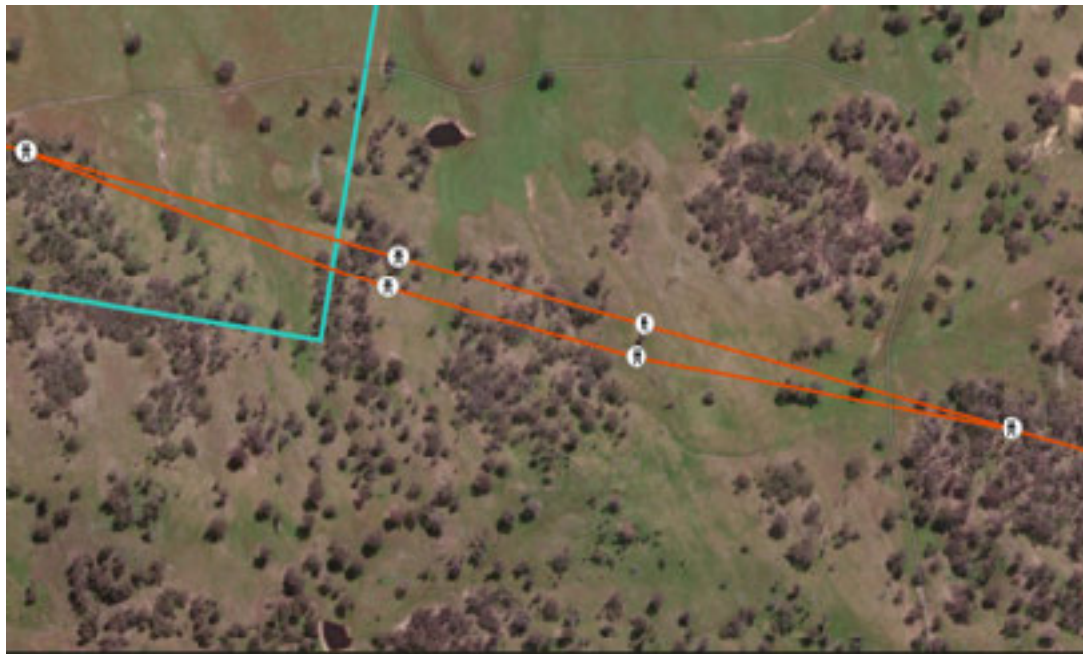
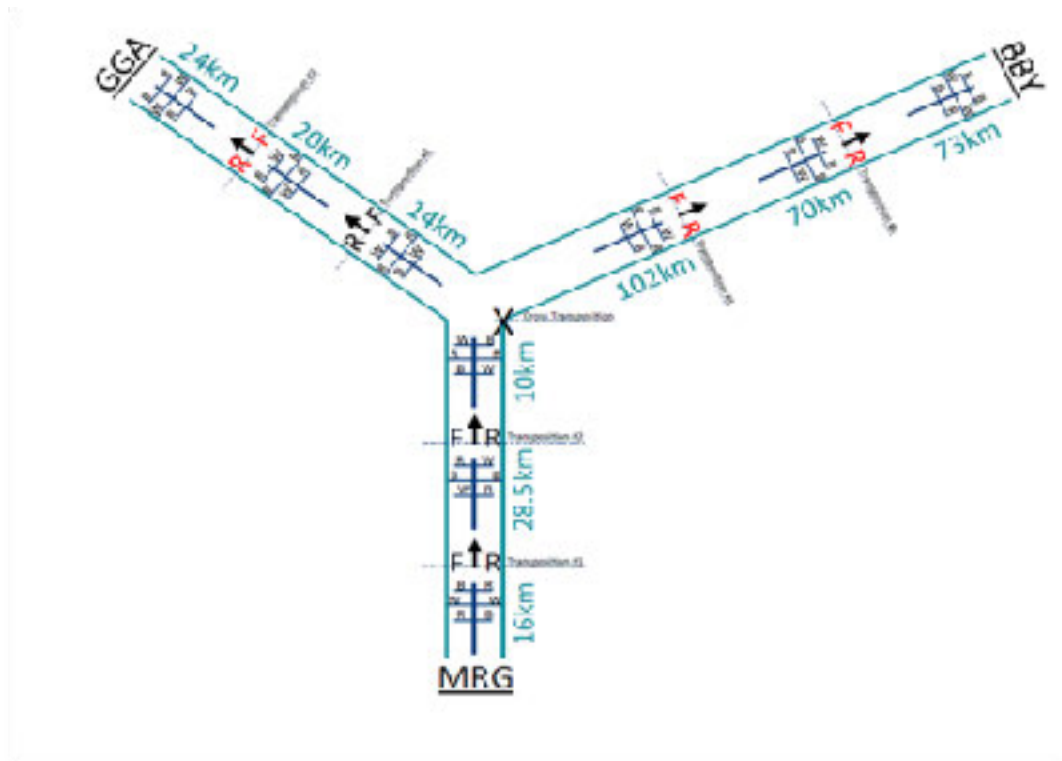


Figure 1(c): Location of Transpositions along HuneLink route



In the Select Committee Inquiry Yolandes Strengers, Associate Dean (Equity, Diversity, and Inclusion) Monash University said, when asked if a community understands the issues and the options and they've almost universally come to the conclusion they want a transmission line underground, should undergrounding occur? The response: 'Yes, in that situation, if it's at all possible, I would be attempting to support the community's wishes.'

There are 365 kms of stories, each and every one different, each and every one important. Generational, heritage, dreams, new beginnings, love and legacy, all with sentiment that cannot be replaced. All in the path of Humelink. We matter and we shouldn't have had to fight this hard to matter. And we are still fighting.

If your so-called consultation was as it should be, we would matter in this equation, and undergrounding would see us matter.

It isn't just those that are directly impacted, but also those indirectly impacted. Like the 4,322 indirectly impacted landowners (as well as many, many more who Transgrid has not correctly identified on their map), 4,322 people who Transgrid indicated they would door knock - and yet most still do not know about the project. Or the neighbours who are only aware because of our own advocacy, and in some cases are even more visually impacted than those deemed directly impacted. Yet these people are not considered. If these people were compensated, as they should be, this would deem undergrounding an even more viable option than it already is.

This project is failing regional people. Transgrid, you are failing us, as we seemingly are made to feel as though we are meaningless, irrelevant, and not considered. This is NOT the expected outcome of consultation, and is a result of poor consultation.

2. EVIDENCE GIVEN BY TRANSGRID TO NSW GOVERNMENT AND SELECT COMMITTEE INQUIRIES

I, along with Peter Lawson and Andrea Strong dedicated 13 long months as community representatives on Transgrid's GHD undergrounding study, privy to the mistakes, the learnings, concern that Transgrid was delaying process and in turn delaying positive outcomes and more poignantly the infuriating misinformation and misrepresentations made by Transgrid in both inquiries.

In the Select Committee inquiry Transgrid stated that with undergrounding they seek advice from experts and mentioned GHD as one of the leading experts they seek out. If this is the case, a HumeLink undergrounding study by GHD in conjunction with STANTEC, worth in excess of \$300,000 should be particularly meaningful to Transgrid. However, Transgrid continue to ignore the study by GHD and spruik misinformation, misrepresenting undergrounding.

Let's compare the facts GHD has given to Transgrid, shall we. The GHD study has the trench sizes of Humelink at 2.1m each, with some examples even smaller (See Figures 2(a) and (b)). But Transgrid stated under oath in the inquiry that a 50m trench will be required.

Figure 2(a): GHD solution, option 2A: 2 x 2.1m trench, 3m separation, total width 7.2m

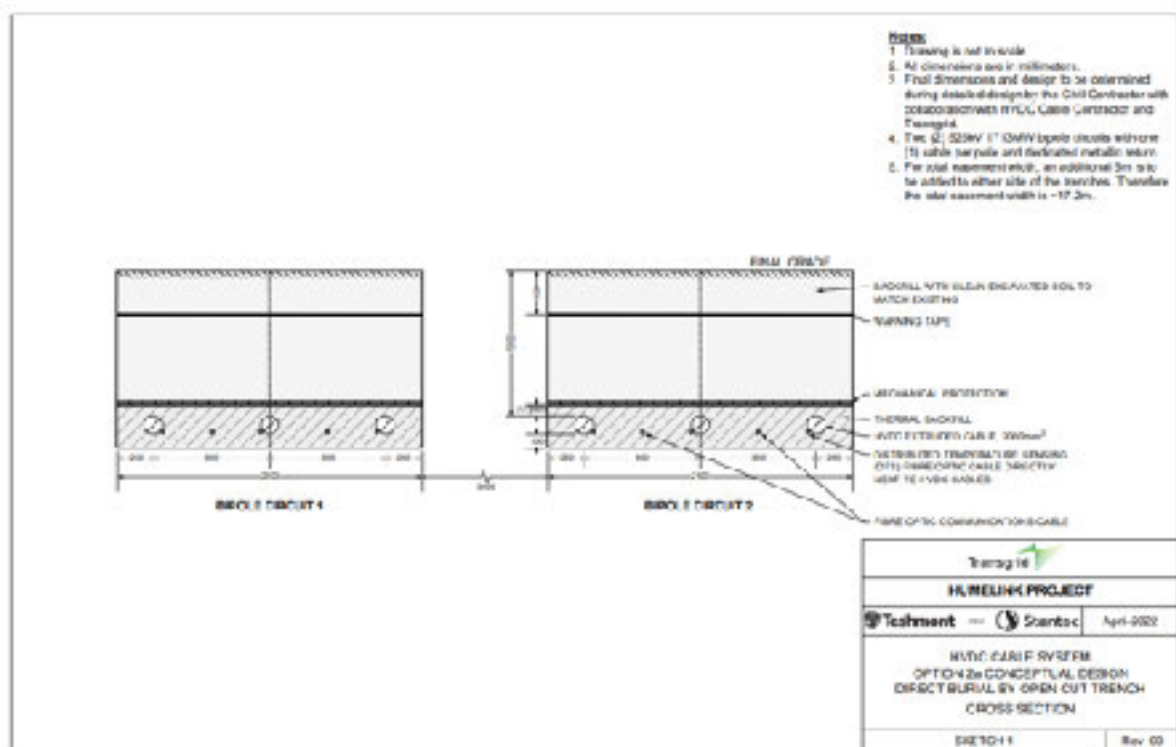
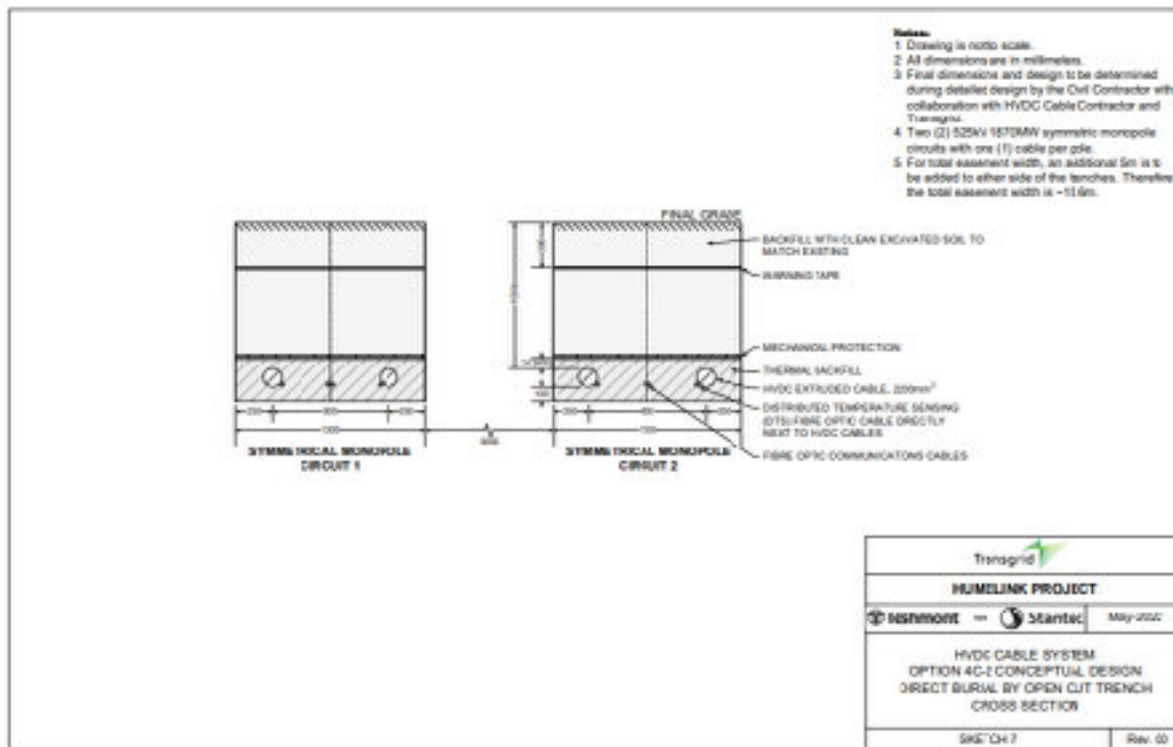


Figure 2(b): GHD solution, option 4C: 2 x 1.3m trench, 3m separation, total width 5.6m



In the Standing Committee inquiry, Transgrid claim that there is no risk of overhead lines starting a Bushfire, yet GHD's report states that : 'Overhead lines increase the risk for bushfire ignition. Overhead lines can restrict access for bushfire fighting as opposed to underground lines, which would have no or negligible impact.' and go on to state 'Whilst it is very rare for overhead 500kV lines to experience faults causing bushfire ignition, the risk is not zero. Whilst rare, 330kV overhead lines are known to have caused bushfire ignition.' But yet Transgrid continues today to state that these lines don't cause fires, even when our own community has witnessed this occur. Furthermore, when in the latest inquiry Transgrid was asked about the damage to the 330kV assets in the Black Summer Fires, in your GHD report it states the very reason we should be putting these assets underground... 'Full undergrounding of all circuits results in there being negligible potential for above ground bushfire to impact and damage undergrounded assets.'

Transgrid continues to use 'cost' to consumers as the key reason to put "undergrounding to bed", but undergrounding is actually considering consumers, protecting them from the long term recuperation costs of damage to overhead assets which is a certain risk in every weather and fire event. Undergrounding is safeguarding the grid by protecting the assets. Also undergrounding is likely the quickest way to deliver the HumeLink project, as strong community opposition threatens lengthy delays to the overhead option.

Transgrid argues that difficult terrain is problematic for undergrounding. However at no point does GHD's study suggest this. It states the terrain to be easy to medium in topography, with no reference to 'difficult' as a measure.

Transgrid are headstrong in only quoting the costs of undergrounding found in this report, and even go further to suggest that the GHD's costs are under what they should be. Yet we know due to an independent review by Amplitude Consultants that the costs are severely

inflated and flawed, and the cost of undergrounding is a mere 1.1 to 1.5 times the cost of the overhead option.

The detail in the report completely contradicts Transgrid's statements. Yes, there are 52 outstanding issues still remaining outstanding. Yes we as a community didn't endorse the report based on these outstanding issues and maintain the report is unbalanced. But when Transgrid is blatantly ignoring their own 'expert' GHD, not only does it make a mockery of the time the community spent on this study, but it seems quite an aggressive slap in the face to GHD and STANTEC themselves.

Transgrid has continued pushing its 'sterilisation' spiel, when scientific studies overseas say there is NO reduction in crop yields above underground cables, and experts in the inquiry denied sterilisation claims. See below Figure 3 that shows the impact of transmission lines and underground cables on land use. The image on the right shows a crop growing unimpeded above underground cables. Experts state that you can plough to a depth, that no ploughing implement is capable of. See Figure 4 below showing land use impacts of undergrounding post laying underground cables detailed for the Marinus project. Ask any cropping farmer or grazier here, having overhead lines impedes aerial spraying, and fertilising, restricts access under the lines for large machinery which is a massive concern. For safety reasons and uninterrupted operations, underground is a better option for our agricultural operations.

Figure 3: Landscape character and land use impacts of overhead lines and underground cables

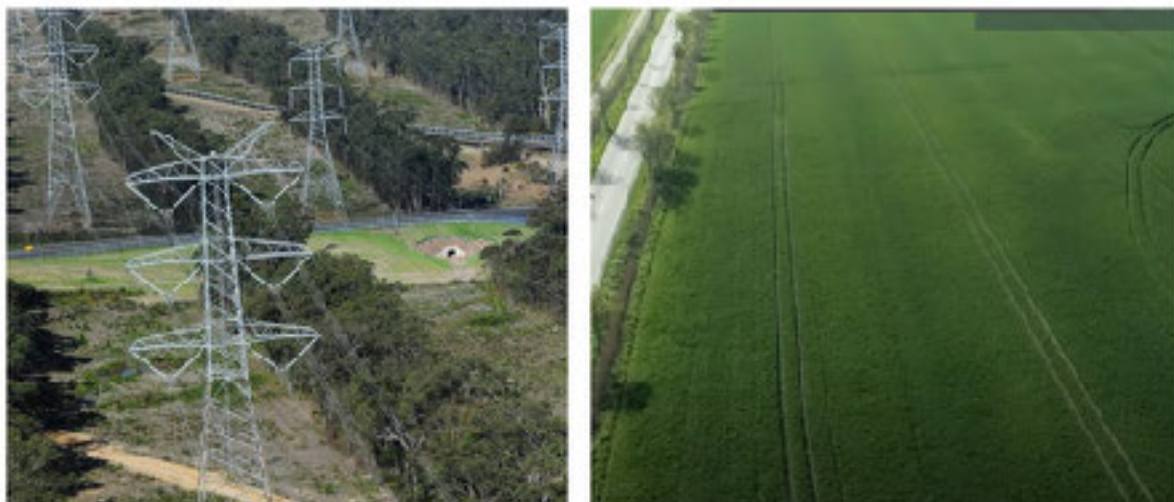
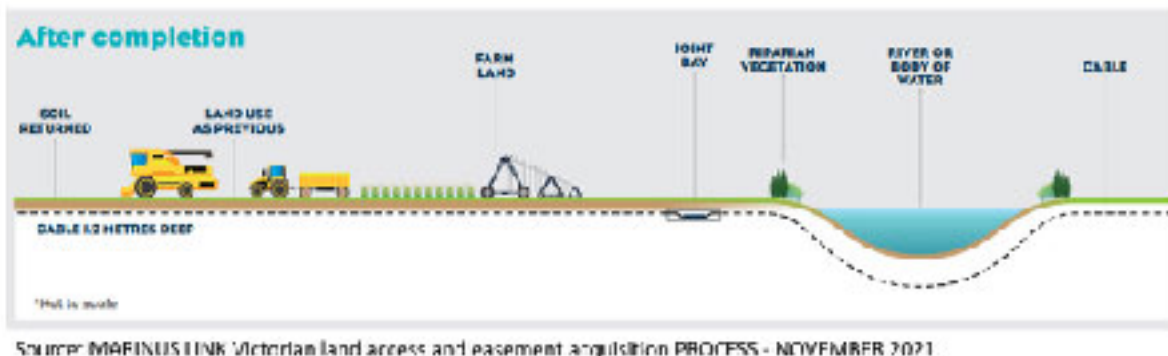


Figure 4: Land use impacts of undergrounding post laying underground cables



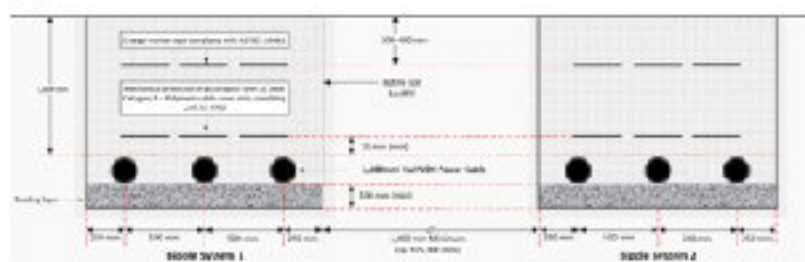
Source: MAFINUS LINK Victorian land access and easement acquisition PROCESS - NOVEMBER 2021

Murraylink is a 180km HVDC underground system that has won Environmental Awards, and is known for managing to only remove two trees in its wake. Transgrid consistently suggests that undergrounding is more environmentally damaging, yet we are comparing a 70m easement overhead, to a probable 12m easement for undergrounding. As per the Amplitude Review, we are talking 2 x 1.5m wide trenches, to a depth of 1.25m (see Figure 5 below), in comparison to the clear felling 70m wide easements, 50m X 70m crane pads, massive cement tower pads, and footings buried in concrete to a depth of up to 25m, and towers up to 80m tall - a visual and physical impediment to the environment for 80 years.

Figure 5: Amplitude Review option 2A, option 4C: 2 x 1.5m trench, 1m separation, total width 4m

Amplitude solution: 2 x 1.5m trench, minimum 1m separation, total 4m

Figure 5 – Cable Trench Profile



Transgrid discusses the use of 'Slurry'. May we put this in more technical terms, 'thermal stable backfill'. Whilst the GHD report makes reference to thermal stable backfill, the Amplitude report states that this is not necessary, and a direct burial is possible.

We even heard in the latest inquiry reference to SuedLink, and certainly refer away, but be accurate in doing so. SuedLink was originally an overhead proposal, but after 6 years of

fighting, there was a win for the rural communities that this was destined to impact. Now it is going underground via HVDC for 750km at 525kV. SuedLink will be close to double the size and capacity of HumeLink. So when Marie Jordan seeks to suggest SuedLink as a comparison to Humelink, this is not correct. Humelink is 2200MW. SuedLink is a massive 4000MW.

It was stated in the Transgrid Advisory Council meeting minutes, where a question was posed by Craig Memery from PIAC to Brett Redman Transgrid CEO, 'On Undergrounding, do you have any thoughts on what you could have done in 2022 to put it to bed? Are you disappointed that we are still having conversations on undergrounding after the report was released?'... Undoubtedly this was exactly the agenda and premise of the undergrounding study, in colloquial terms to 'shut up the community'. We aren't going anywhere!

Transgrid have stated to the community that you are advocating for undergrounding, but have shown no evidence of this, and have gone as far in the inquiry to only seek to disengage and disingenuously plague undergrounding. In front of our very eyes we have witnessed you working against the community rather than 'with' the community, and trust lost.

Transgrid has failed in its role to consult. Transgrid has failed in its role to seek better alternatives. Transgrid has failed to advocate for our communities. Transgrid have failed to allow undergrounding a fair go and have sought to only negatively plague it to protect their flawed overhead agenda, Transgrid cannot be trusted to assess, re-assess or determine what is best for Humelink, but more importantly what is best for regional Australia.

But I guess what should I know. I am just a community member that should not need to know this, should not have had to research this, should not have had to invest my own time in this, and should not have to point out Transgrid's failings, or attempt to make them see. Transgrid are supposed to be the experts, but because of their ignorance to the validity and feasibility of undergrounding, we as a community have had to rise to the challenge put before us.

I ask, will Transgrid admit fault, and apologise for what you have, are and continue to inflict on us all?