**Western Victorian Transmission Network Project - Options**

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Dear Minister,

I am writing to ask you to do what you can to stop activity on the Western Victoria Transmission Network Project (WVTNP) until *ALL* options including undergrounding are properly considered.

AusNet, the current proponent, is continuing to demonstrate it has no social licence and is not actively listening to the tens of thousands of Victorians that will be adversely affected by these transmission lines and the up to 80-metre-high towers along the 190km route. I support the idea of connecting the whole state to renewable energy. However, the overhead transmission option that AusNet is progressing continues the use of dated technology which will bring extra risk and many adverse impacts for all communities dissected by the proposed route.

Reducing risk and impact to communities and the environment by undergrounding energy transmission [is best practice around the world](https://www.tdworld.com/grid-innovations/transmission/article/20966809/reimagining-the-grid), many [Australian studies support this.](https://www.moorabool.vic.gov.au/files/content/public/about-council/large-projects-impacting-moorabool/western-victoria-transmission-network-project/wvtnp-high-level-hvdc-alternative-scoping-report.pdf?utm_source=open_letter&utm_medium=letter&utm_campaign=link_click) Compared to overhead, underground energy transmission is far less likely to be impacted by extreme weather or physical interruption, hence is more reliable and requires less maintenance. Undergrounding also avoids increasing the risk of, and risks associated with, fighting catastrophic bushfires and hence is safer. Undergrounding also presents far less impact to property values and the environment.

AusNet recently released a summary of its [preliminary findings from its investigation into undergrounding](https://www.westvictnp.com.au/assets/resources/Underground-construction-summary-November-2021.pdf) the WVTNP. These studies are required by the [Environmental Effect Statement (EES) process](https://www.planning.vic.gov.au/__data/assets/pdf_file/0020/506504/WVTNP-EES-Scoping-Requirements-final.pdf). While the findings are only preliminary, AusNet has prematurely dismissed the option of undergrounding on the basis of only looking at one option which uses High Voltage Alternating Current (HVAC) and stating this would cost approximately 16 times more than the proposed overhead HVAC option. There are several concerns that AusNet’s summary raises:

* The summary contains very little detail on design, and no detail on cost, and has been used to ‘suggest’ that an underground AusNet HVAC system, although unsubstantiated and without peer review, is prohibitively expensive.
* AusNet’s perfunctory assessment presumes the currently identified overhead transmission corridor will be used. This terrain is not considered optimal for underground transmission given its elevation shifts, however, numerous options exists to lay underground cabling along flatter terrain have not been explored.
* AusNet has since admitted that the cost to put its ‘HVAC design’ underground is **not 16 times** more expensive which the summary claims. AusNet representatives admitted to representatives from the Local Council's in early December 2021 that it was only "five times more expensive”, **not 16**. However, I am yet to see this be corrected officially anywhere.
* Why has only one undergrounding option been considered, in this case HVAC? Why hasn’t underground High Voltage Direct Current (HVDC) been considered in similar detail?
* Why is the decision to provide extra transmission capacity to supply reliable and renewable power to Victorians based solely on short-term capital cost? It is far too narrow thinking to base the design of the solution for this massive project solely on construction costs. Why aren’t the full social, environmental and economic costs and impacts mentioned above taken into account, over the life of the system?

In contrast to what is proposed for the WVTNP, the following examples argue that undergrounding provides the best outcome for all concerned:

* The Marinus Link from Hazelwood to Tasmania is being designed as an underground HVDC cable for the 90 km in Gippsland – the commercial business case says it is more economically viable, more efficient, and more beneficial to go underground rather than overhead.
* The Star of the South offshore wind farm, off Gippsland, is proposing to transmit HVAC underground from the beach to Hazelwood for over 75 km - “because of the greater benefit they see to the community, landscape and the environment.”
* Power for the Victorian Desalination Plant at Wonthaggi, commissioned in 2012 (and currently managed by AusNet) - a new 87 km underground 220 kV HVAC power cable was constructed to supply power to the plant, in the same easement as the transfer pipeline. Underground power was the State Government’s preferred power solution for the project as it presented the least impact on landowners, farmers and other people living and working in the area.

Underground options for the WVTNP are feasible. The report by HVDC experts, Amplitude Consultants, into underground HVDC (as opposed to HVAC) alternatives released in June this year, contains detailed concept designs and costings for three feasible and technically superior, underground HVDC options for the WVTNP.

Whilst the upfront capital cost of underground transmission systems typically exceed those of overhead systems, over the life of the system when considering all costs including environmental and social impacts, undergrounding is a vastly superior outcome. Over a notional 40-year life of the system underground transmission presents far less impact and risk than AusNet’s overhead option. Crucially, underground transmission does not add extra risk to bushfire prone areas.

The Federal and State Governments (through the Australian Energy Market Operator) own the project, and the State Government can stop it. As an impacted community member and Victorian constituent, I am asking you to ensure this project is transparent and that proper analysis of ***all*** the alternatives is undertaken. I ask that you commit to a better, safer, smarter underground solution for the WVTNP.

Undergrounding options are feasible for the WVTNP and I am sure these will win the support of all communities from Sydenham to Bulgana. I ask you to please stop the current project and send it back to the drawing board to deliver the project in a way that minimises the impact on our communities and environment.

The impacts these proposed overhead transmission lines will be permanent and cannot be mitigated later. What will you do for the thousands of Victorians that will be impacted by the proposed transmission lines? I urge you to please step forward and help drive the future thinking required to provide the renewable energy transmission solution that Victorians, all Australians, and our natural environment deserve.

Regards,