

Response to the
Renewable Energy Zone
Development Plan
Directions Paper



Energy Grid
ALLIANCE



Energy Grid Alliance was established with the purpose of engaging with transmission companies, energy regulators, market operators, relevant peak bodies, government and communities to establish best planning practices for new energy transmission infrastructure and to inform on the benefits of working with communities to develop and maintain social license.



Introduction

As the States ageing coal-fired generation is retired, it will increasingly be replaced by wind and solar in different locations. Stronger transmission networks will be needed to move the power around the system locally and interstate. Increasing the capacity of existing transmission interconnectors or high voltage lines can lead to more customers accessing cheaper and more reliable electricity.

The need for an effective and efficient transmission network to transfer energy generated in renewable energy zones to the State power grid is recognised but it is fundamental the impacts on environment and community be considered at the inception stage of each project.

Route selection should try to avoid, minimise, or offset impacts on important environmental, social, cultural and landscape values and avoid community and land use conflict by utilising existing rights-of-way and undergrounding as a preferred transmission option. Feasibility of the preferred route should be determined early using GIS desktop analysis.

Under the current regulatory framework, community consultation, impact avoidance and mitigation measures are dealt with by the proponent, often through the Environment Effects Statement (EES) process, the most rigorous environmental impact assessment process in Victoria. This **often-lengthy process** results in **material project delays** and **increases the risk the project will not proceed at all**, impacting on the Victorian economy, energy infrastructure investment, impacted communities and Victorian energy consumers.

Transmission companies, energy regulators, market operators, relevant peak bodies and government need to partner with community in every aspect of planning, development and decision making, including the development of alternatives and the identification of a preferred solution. Community engagement is key to the success of any major infrastructure project and is most successful when it establishes and delivers on clear expectations and gives people the opportunity to influence decisions.

To meet future growth and speed up project delivery, community stakeholders should **actively participate in the decision-making process** and be involved in drafting plans for energy transmission networks. This will help reduce land use conflicts by:

- Identifying potential transmission corridors and substation sites using existing rights-of-way
- Identifying areas where undergrounding is essential and overhead transmission is acceptable
- Defining setbacks from materially populated township settlement boundaries, habitable dwellings, zones, overlays, buffers and strategic agricultural/fam land.

The bid to find the best and most economically feasible solution to accommodate multiple major new renewable energy projects while considering competing values and trade-offs should be a major focus for transmission networks and interconnectors.



Western Victoria Transmission Network Project (WVTNP)

The WVTNP proposes the development of a new transmission line starting at Bulgana, near Stawell in Victoria's west, and covering approximately 190km to the north-western Melbourne suburb of Sydenham.

The WVTNP is critical infrastructure required to unlock the renewable energy potential of western Victoria as a key Renewable Energy Zone and will help to deliver clean and affordable energy to Victorians. The project will also drive economic growth and bring new job opportunities to the region.

The project will include:

- a new terminal station to the north of Ballarat
- new 220 kilovolt (kV) double circuit overhead transmission lines from the new terminal station to Bulgana (via Waubra)
- new 500kV double circuit overhead transmission lines from Sydenham to the new terminal station
- several minor upgrades, including to existing electricity infrastructure.

Western (V3) Stage 1 | Category 2 refers to constructing a new 500kV double circuit overhead transmission line from North Ballarat to Bulgana. This represents an alternative to the proposed WVTNP.

Planning assessments underway as part of WVTNP need to be amended to include 500kV to Bulgana.

The project has been identified in the REZ Development Plan Directions Paper as having a 'High Risk' of delivery for the following reasons:

- Project within greenfield area therefore vegetation clearing required
- Infrastructure close to sensitive areas
- Conflicting land use
- Potential conflicting regarding future residential development.
- Potential community concerns regarding increased visual impacts and environmental impacts.

Further to this, the 500kV line from North Ballarat to Sydenham poses significant impacts to farming, agriculture, materially populated towns, communities and state significant landscape.

Rural communities across Western Victoria are united against the unacceptable impacts of overhead transmission infrastructure: altering landscape character, causing widespread damage to critical habitat for threatened species, increasing fire risk to wildlife habitats and thousands of residents, destroying visual amenity, harming local agriculture, associated businesses, and reducing property values.

The push-back from community, concerned about the impact of overhead renewable energy transmission signals a new challenge for Renewable Energy Zones in Victoria – a challenge that will be faced by every new transmission project unless community stakeholders **actively participate in the decision-making process**.

The priority when planning transmission lines routes should be to avoid land use conflict in the first place. Considering the different characteristics of essential elements of energy transmission, an approach to transmission route design should be developed based on four primary aims:

- Use of existing Transmission Corridors or Rights-of-way (ROW)
- Avoid or minimise socio-economic impacts
- Avoid or minimise environmental impacts to protect and conserve the environment
- Ensure the Triple Bottom Line Net Economic Benefit equals the Market Benefit less costs.

Use of existing Transmission Corridors or Rights-of-way

Energy Grid Alliance is concerned that the best solution may be one that is not currently being considered.

Every effort should be made to site new transmission lines, to the greatest extent feasible that is consistent with economic and engineering considerations, reliability of electric system, and protection of the existing environment, utilising corridors in the following order of priority:

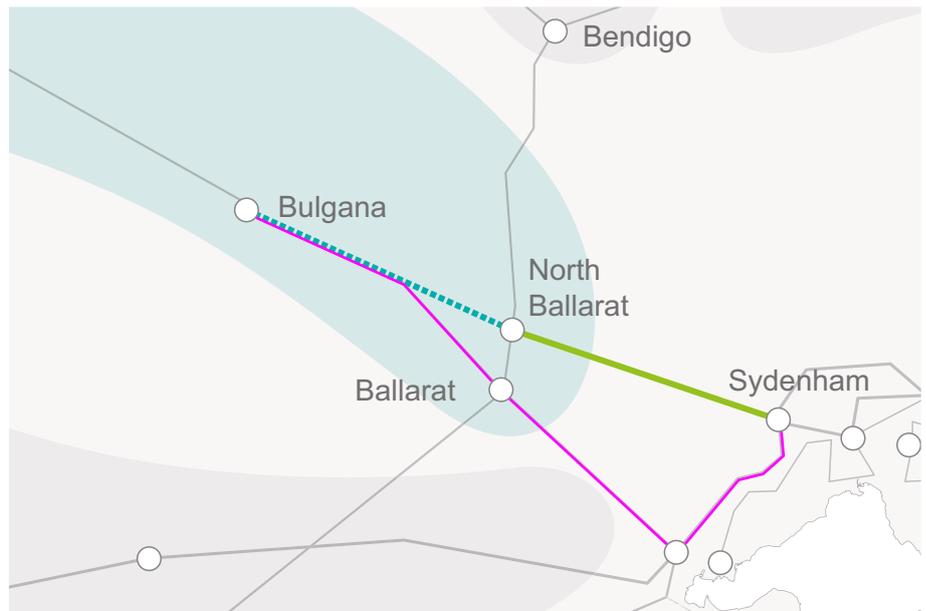
- existing utility corridors
- highway and railroad corridors
- new corridors.

When rigorously evaluated as part of routing decisions, corridor sharing can be a useful method in mitigating environmental, property, and community impacts of a new transmission line.

The siting of transmission facilities must seek to avoid to the maximum extent possible areas of high ecological, cultural, economic, and aesthetic value and sensitivity.

The objective is to protect and maintain the natural, aesthetic and scientific values of significant geological and geomorphological features.

Overhead transmission infrastructure should not permanently alter character of state significant landscape. When the construction of transmission facilities in or near sensitive habitats cannot be avoided, impacts should be minimised using underground cables instead of overhead lines.



Proposed 500kV line
Proposed 220kV line (potential to be upgraded to 500kV)
Recommended 500kV line (by Energy Grid Alliance)
Image Source: DELWP REZ Development Plan Directions Paper pp25.

Recommended Route

Compared to the proposed route of the WVTNP, this alternative utilises existing transmission corridors. This strategic route:

- Improves security of supply to Melbourne by mitigating the risk the current proposed project may not proceed at all due to cumulative environmental effects and community conflict.
- Avoids further project delays
- Avoids or minimises socio-economic impacts
- Avoids or minimises environmental impacts to protect and conserve the environment
- Avoids further native habitat fragmentation
- Avoids or minimised further bushfire and fire-fighting risk
- Avoids unnecessary impact on materially populated towns and residential areas
- Avoids further land use change
- Avoids further loss or fragmentation of productive agricultural land

Energy Grid Alliance recommends a comprehensive review of the Western Victoria Transmission Network Project. Overhead transmission infrastructure is not in the public interest when it results in such vast direct and cumulative disbenefits. In protecting Victoria's economy and environment, it is vital energy transmission line routing and siting serves to protect and enhance our socio-economic and natural environments by avoiding sensitive, materially populated and strategically productive areas.



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