



The following document represents a summary of the questions and answers presented during the webinars undertaken on the VNI West Additional Consultation Report. Please note this information will be supplemented by fact sheets relating to agriculture and easements in response to questions posed on those topics.

Webinar One

Q1. If Option 5's high impedances and differing network configuration will result in less new renewable generation from V3 Western Victoria REZ and the V2 Murray River REZ able to be supported, how is this beneficial overall? Does this mean that other new transmission lines and new terminal stations will be required in the future to support those two REZs, particularly V2? As said on p. 27 of the Consultation Report, Option 5 does not increase transfer capability between Kerang, Bendigo and Ballarat - surely the implication of this needs to be understood now not later?

Option 5 combined with WRL offers an additional 3.4 gigawatts of transmission capacity to connect renewable generation in REZs in Victoria. That is comparable with Option 1 which was the proposed preferred option in the PADR, it certainly meets the needs for this project, but we acknowledge the higher impedances and that different configuration does result in less renewable generation being supported than some other options. Option 5 also maintains the same northward interconnector capability as option one, the highest of all options considered, and only slightly lower southward capability. Option 5 doesn't have a connection around Bendigo to the existing network and because of that, Option 5 does not increase the transfer capacity between Kerang, Bendigo and Ballarat areas like the other options do. As part of normal electricity supply planning practices, AEMO will monitor the electricity demand in the area. That is all done as part of the Victoria Planning report and currently there are no plans for network improvements around Bendigo.

Compared to other options considered, it is worth noting the lower costs and the lower benefits tend to balance out. The analysis shows that the estimated net benefits from Option 5

remain equal highest with Option 3A. Option 5 is also robust to changes that were tested through sensitivity analysis and boundary testing. In particular, assuming it is legislated, the Victorian Government's offshore wind policy (modelled as a sensitivity) would result in Option 5 being the option that maximises net benefits for consumers. This is because the greater resource diversity created from the introduction of offshore wind increases system resilience and reduces the value of VNI West options that have the potential to harness significantly more renewable generation in Western Victoria than Option 5 (such as Option 3A).

Q2. What are the economic benefits of the project?

VNI West option 5 is expected to deliver \$1.4 billion in net benefits in present value terms in avoided generation, storage and REZ transmission costs. VNI West and WRL combined deliver \$1.9 billion in net benefits .

Q3. Is the Dinawan Energy Hub going ahead?

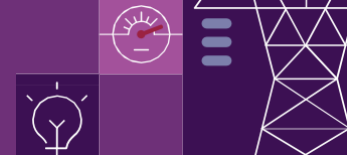
The Dinawan Energy Hub is approximately 2.5 GW hybrid wind, solar and storage project, which is proposed by Spark Renewables in the Southwest Renewable Energy Zone in NSW. This project is currently undergoing environmental approvals. VNI West will play an important role in supporting the Southwest Renewable Energy Zone by increasing the amount of energy which can be exported from the zone both into Victoria and eastward to Wagga Wagga.

Q4. Is there any impact on the town of Kingston?

There are no foreseen impacts on Kingston associated with the VNI West project.

Q5. This is the first time an MCA has been applied as a formal decision-making tool to consider critical social, environmental and cultural factors in transmission infrastructure decision making. Can you please share further context about why the proponents landed on a 70% weighting towards the economic net-benefit objective given the intent to capture the other salient factors mentioned?

The current RIT-T framework has not allowed us to consider other elements outside of technical



feasibility and net economic benefits. The NEVA Order allowed AVP to apply an MCA and consider additional elements in the process relating to the Victorian scope of the project. The proponents landed on a 70% weighting towards the economic net-benefit objective because the project still needs to deliver on net benefits for consumers as a key element of the RIT-T.

AVP and Transgrid did run a sensitivity analysis where the weighting percentages were changed. Even bringing that weighting down to the minimum, option 5 was still ranked as number one due to its strong performance across all the objectives.

Q6. Has the Plains Wanderer habitat on privately owned land been considered near the Terrick Terrick National Park?

The MCA has considered avoidance of national parks and areas of habitat for threatened species where known. The area of interest remains very broad and refining the route will involve undertaking further field assessments. Ecology assessments are key, and these will include studying Plains Wanderer and its associated habitat.

Q7. Are there any impacts on NSW planning of VNI as a result of the NEVA Order? Would it have been useful to reconsider whether the NSW path remains the most economic option as a consequence?

The NEVA Order confers upon AVP certain functions which include the assessment of alternate options to the preferred options in the PADR to expedite the development and delivery of the VNI West project. The Additional Consultation Report was prepared by AEMO and Transgrid. Alternate network options in NSW have been considered in the process.

Q8. This process that has led to a Victorian centric option hitting the table. Has the NSW work that has been done to date been significantly impacted by it? Is the current proposal that crosses Kerang still the most sensible from a national perspective?

The ISP identifies VNI West via Kerang as the preferred network option. The Consultation Report is looking to refine this, specifically the

¹ NEVA Order - <http://www.gazette.vic.gov.au/gazette/Gazette%2023/GG2023S060.pdf>

² <https://www.esc.vic.gov.au/sites/default/files/do>

connection point to WRL, within that preferred network option.

Q9. Is the intention to secure access agreements with landowners prior to commencing environmental surveys, i.e., before by Q3-4 2023?

We intend to commence cultural and environmental surveys on the preferred corridor in Spring 2023. It is our intention to seek permission from landowners before entering onto any lands. AVP and Transgrid will comply with all applicable laws in accessing property, including compliance with the Essential Services Commission Electricity transmission company land access statement of expectations.¹

Q10. Can you please confirm what level of early works AVP intend to complete? Will they be the same as outlined in the slide pack by Transgrid, noting transmission projects are typically build, owned and operated by a third-party proponent in Victoria?

Currently the NEVA Order allows AVP to carry out early works for the Victorian components, including the approvals process, technical design and stakeholder engagement. A link to the NEVA Order is outlined in the footnote² below. The early works description can be found at 6.1.

Q11. Is the MCA process a repeatable one for other transmission projects? Is AEMO planning to use this in the future assessments in the ISP, or has it only been possible due to the Ministerial Order?

The MCA has only been made possible due to the NEVA Order. That said, the whole industry is grappling with how these matters can be considered in transmission investment decisions across the board. It is still a work in progress. The AEMC are undertaking a process to consider amendments to the transmission investment framework. AEMO is also considering how they may be able to incorporate greater social licence consideration in future ISPs.

Q12. Can you confirm that Option 3A assumes new generation connects at two terminal stations, KGTS (850MW) and BETS (750MW), while Option 5 assumes new generation connects only

[cuments/RI%20-%20Transmission%20Company%20Land%20Access%20Statement%20of%20Expectations%20final%2020220512_0.pdf](https://www.esc.vic.gov.au/sites/default/files/documents/RI%20-%20Transmission%20Company%20Land%20Access%20Statement%20of%20Expectations%20final%2020220512_0.pdf)



at KGTS (850MW)?

For both Options 3A and 5, V2 renewable generation is connected at New Kerang 500kV.

Q13. I just want to see clarification on the environmental and cultural surveys. Can we clarify who will be undertaking this work? Will AVP be undertaking that or was it Transgrid in the Victorian side?

AVP will be undertaking this work in Victoria, and Transgrid will be undertaking this work in New South Wales.

Webinar Two

Q14. Option 5 does not increase transfer capability between Kerang, Bendigo and Ballarat. Does this mean that other new transmission lines and new terminal stations will be required in the future to support those two REZs, particularly V2? Is this being understood and analysed now rather than later?

That is correct. Option 5 doesn't have a connection around Bendigo to the existing network and because of that, Option 5 does not increase the transfer capacity between Kerang, Bendigo and Ballarat areas like the other options do. As part of normal electricity supply planning practices, AEMO will monitor the electricity demand in the area. That is all done as part of the Victoria Planning report and currently there are no plans for network improvements around Bendigo.

Q15. Are there opportunities for businesses to support/supply Transgrid?

There will be a range of opportunities to support Transgrid through the planning development and ultimately delivery of this project. In the short term, this could be technical and environmental planning services or other consulting opportunities, but ultimately there are large opportunities for local employment, skills development and training and opportunities for the local supply chain. For further information, reach out to vniw@transgrid.com.au.

Q16. Why is the project not connecting through Waubra?

From the net benefits there was not a statistical difference between Bulgana and Waubra. However, undertaking the MCA process, it was clear that Option 5 (Bulgana) outperformed Option 3A.

Option 5 is expected to have the least negative impact on social, cultural and environmental

factors which will most likely support expedited project delivery.

Q17. Please clarify grid strengthening aspect specifically on the synchronous condenser requirements overview.

Systems strength improvements are not part of the 'identified need' for VNI West (as defined in the 2022 ISP), however, it is a key responsibility for AEMO and that will be covered by other initiatives. Specifically, the system strength planning process and associated reports.

Q18. Victoria now has a new SEC. Has the potential for State intervention been considered, not only the market but the delivery models?

No information is currently available on this.

Q20. Is there a way to get more information with regards to how the increased REZ transmission capacity was taken into account for the net market benefits? It was interesting that Option 3A provided almost double the REZ transmission capacity over option 5, but had a similar net market benefit.

REZ representation in the modelling including REZ transmission are described in Appendix E of the market modelling report accompanying the Additional Consultation Report. The representation is the same as that in the 2022 Integrated System Plan and is described in more detail in two AEMO reports: the *2021 Inputs Assumptions and Scenarios Report*, July 2021, Section 3.9 and *ISP Methodology*, August 2021, Section 2.3.4.

Option 3A offers greater access to REZs along the route than Option 5, but lower interconnection northward from Victoria to NSW. Option 3A also costs more than Option 5 (eg, capex of \$3,685m, compared to \$3,282m). The net economic benefits assessment takes all these factors into account.

Overall, Option 3A and Option 5 are ranked effectively equally on a scenario-weighted basis. The sensitivity and boundary testing finds that Option 5 performs better than Option 3A when assumptions are varied in the direction the market currently appears to be heading (including when Victorian offshore wind developments are assumed).

Section 4.6 of the market modelling report discusses the relative market impacts of the two options in detail.

Q19. Is there potential to have a terminal at Wedderburn?

The line will be open for renewable energy connections all along the route for proponents



to build a connection and build a terminal station if needed. AVP and Transgrid are specifically looking at building the terminal station near Kerang. The purpose of that terminal station would be primarily to connect into the existing 220 KV lines that run from Kerang to Bendigo to bolster the networking connections there.

Q20. How is Aboriginal cultural heritage investigated and addressed in a project of this kind?

The MCA included a desktop analysis of known sites of Aboriginal significance. As a part of the engagement process, the team will consult with all potentially impacted Traditional Owner groups to confirm and amend the outcomes of the MCA, as well as learn of any other sites or elements of importance which should be considered. The engagement will also consider how VNI West may be able to provide positive outcomes and opportunities for Traditional Owner groups.

As the project progresses, Cultural Heritage Management Plans will be prepared in accordance with the requirements of the *Aboriginal Heritage Act 2006* to investigate the potential impacts to Aboriginal cultural heritage and identify how heritage can be best protected. This will be done together with Traditional Owner Groups, Registered Aboriginal Parties and First Peoples - State Relations.

Q21. Are the Victorian works likely to be contestable?

The NEVA Order takes contestability out of the regulatory framework, but this does not necessarily mean the Minister will not want to make this a contestable process.

Q22. Did the proponents consider wider economic benefits (e.g. regional jobs, economic output) as part of the MCA? If not, why not?

The MCA was designed to consider factors that may impact on the ability to expedite project delivery pursuant to the NEVA Order. Wider economic benefits are not part of the RIT-T cost benefit assessment and were not considered to have a large impact on delivery risk so were therefore not included as part of this MCA.

Q23. Can you confirm that Option 3A assumes new generation connects at BGTS 500 kV, while Option 5 assumes new generation connects at BGTS 220kV, with 2x1000MVA transformers connecting BGTS500 to BGTS220? In other words, in Option 5 no generation connects into the new

500 kV lines.

For Option 3A, V3 renewable generation is connected at Waubra 500kV and Bulgana 500kV.

For Option 5, V3 renewable generation is connected at Bulgana 500kV.

Webinar Three

Q24. How can social impact be measured? How do you value the mental health costs, anxiety & frustration incurred by people who live nearby?

Mental health impacts, anxiety and stress is a real experience, and we do not endeavor to put a value on that. We are working to learn from the past and understand how to minimise that anxiety. In some cases, this will involve providing certainty as soon as possible, in other cases, it involves working with impacted communities earlier so that they can be a part of crafting the appropriate solution.

Q25. How was the figure of \$8k /km arrived at & why for only 20 years? Why not forever? This cost impost is tiny compared to the total cost.

This amount is a new Victorian government payment that is in addition to the compensation process that is applied in Victoria.

- More information on the compensation process in Victoria can be found at: <https://www.westernrenewableslink.com.au/assets/resources/Landholder-Guide-Option-for-Easement-process-and-compensation-March-2023.pdf>
 - Refer to pages 10 and 11 for a quick snapshot of landholder payments.
- Information on the recently announced additional payments can be found at: <https://www.energy.vic.gov.au/renewable-energy/transmission-and-grid-upgrades>

AVP would encourage any interested or concerned community members to contact rezdevelopment@delwp.vic.gov.au

Q26. How will AEMO handle impact to roads and potential compensation for increased wear and tear on road infrastructure?

We did not consider roads as part of the MCA except to look where different corridors would cross over main arterial roads. However, when we get into the process of the formal impact assessment, traffic and transport impacts will be thoroughly assessed. It is important to understand the conditions of the existing road network and



document that for the project team to identify the suitable routes for construction vehicles and other equipment.

Q27. Is it possible for the transmission pylons to be designed as 3D sculptures such as ibis, kangaroos, cattle, reflective of geographic area etc so that they add rather than detract from the landscape and generate tourist appeal into long term. We accept we need transmission lines to enable renewable power to be affordable as it was intended, but it need not scar the landscape. There are great examples of these overseas.

We would love to be able to do that. There's so many different possibilities and options that we'd love to be able to get creative and think about when we get to the point of actually designing for the future. Great suggestions and keep them coming.

Q28. What's the process for securing farm permits and how often does this need to occur?

Permits are required to perform some operations on farms. The process for securing permits is through engagement with the transmission operator.

Q29. What was the approximate cost for renewable energy projects to link into the VNI West?

Several variables are factored into the cost to connect a renewable energy project to transmission infrastructure. Variables such as the location of the project in relation to the existing transmission network, whether the project is connecting to an existing terminal station, and the prevailing construction and material costs will all contribute to these connection costs. It is important to note that these costs do not form part of the cost base of this project. These costs are typically borne by the renewable energy project connecting to the transmission network.

Q30. How close would these lines go to residences?

Transmission infrastructure will ideally be a minimum of 300m away from residences³. AVP and Transgrid are committed to ensuring high voltage infrastructure is placed as far away from homes as possible, while adhering to the general design principles of maximizing straight sections

³ <https://www.aeic.gov.au/observations-and-recommendations/governance-compliance> (refer to section, 'Setback distances')

of line and placing towers at even intervals.

Q31. What do you mean by high level network connection? Can you explain what you mean and how you will work that out please?

What was meant by *high level* was that we will get more detail as we progress through the route development process.

Contact us

AEMO

To find out more, speak to the project team and have your say, please visit our website at:

www.aemo.com.au/vni-west

You can also call us at

1800 824 221 or email us at

VNIWestRITT@aemo.com.au

Transgrid

www.transgrid.com.au/vniw

vniw@transgrid.com.au

1800 222 537