



Victoria to New South Wales Interconnector West (VNI West) Regulatory Investment Test for Transmission (RIT-T) Progress Update

This is the fourth project update for the Victoria to New South Wales Interconnector West (VNI West) Regulatory Investment Test for Transmission (RIT-T) process. The [Project Assessment Draft Report \(PADR\)](#) for VNI West was published on 29 July 2022.

VNI West (via Kerang) is the proposed preferred option identified under the PADR. AEMO Victorian Planning (AVP) and Transgrid are welcoming feedback on the PADR until 9 September 2022. This update provides an overview of the key PADR findings, and how stakeholders can ask questions and provide feedback.

The VNI West project proposal

VNI West is a proposed new high capacity 500 kilovolt (kV) double-circuit overhead transmission line between Victoria and New South Wales. The project would connect Western Renewables Link, from a new terminal station north of Ballarat, Victoria with Project EnergyConnect at a new Dinawan substation, between Jerilderie and Coleambally, NSW. The project also involves the enhancement of the Project EnergyConnect transmission lines between the Dinawan and Wagga Wagga to operate at 500 kV specification rather than 330 kV.

The [2022 Integrated System Plan \(ISP\)](#) identifies VNI West as an actionable ISP project to be progressed urgently, which would:

- Unlock clean, lowest-cost electricity from existing and future renewable energy zones (REZs) in Victoria and New South Wales as coal-fired power stations close.
- Increase the capacity for sharing electricity between Victoria and New South Wales, improving the reliability and security of electricity supply for both states.
- Reduce carbon emissions, and helping achieve state-based renewable energy targets, while continuing to deliver safe, reliable and affordable electricity to consumers.

What is a Project Assessment Draft Report (PADR)?

The PADR identifies a proposed preferred option for VNI West, for consultation and feedback.

It is a key deliverable in the Regulatory Investment Test for Transmission (RIT-T) process which is an economic cost benefit test that evaluates the technical and economic feasibility of new transmission infrastructure.

We are here	RIT-T activity	Key date	What it does
	Project Specification Consultation Report (PSCR)	Published 13 December 2019	The PSCR* sought feedback and advice on the identified need for new transmission infrastructure and explores potential investment options to address this need
	Project Assessment Draft Report (PADR)	Published 29 July 2022	The PADR identifies and seeks feedback on the draft preferred option
	Project Assessment Conclusions Report (PACR)	To be published in late 2022	The PACR concludes on the final preferred option to deliver the highest net market benefits for consumers

*The PSCR was published prior to the new actionable ISP framework coming into effect. VNI West RIT-T is now progressing under the actionable ISP framework.



What does the PADR consider?

The RIT-T is an economic cost benefit test. Under the National Electricity Rules, the scope of the RIT-T is limited to determining if a project will deliver a net market benefit to the National Electricity Market (NEM) based on economic and technical feasibility. “Net market benefits” basically means economic benefit to all those who produce, consume and transport electricity in the NEM.

Market benefits arise from avoided or deferred investment in new generation and storage that would be required if VNI West does not proceed, changes in fuel consumption arising through different generation dispatch patterns, differences in renewable energy zone – or intra-regional – transmission investment costs, changes in supply reliability related to voluntary or involuntary load curtailment, changes in network losses, and option value – assessed through alternative scenario and project implementation timing.

A RIT-T can be likened to a business case for any project or venture. Underpinned by the ISP Actionable framework, credible options are ranked according to their technical and economic merits, to determine the preferred option that best meets the need and timeframes and delivers the highest net market benefits.

AVP and Transgrid understand there is a range of matters that are important considerations for the project, such as environmental, land use, safety, amenity, social, cultural and community. If not appropriately taken into account, these factors will result in higher project costs which would lower benefits for consumers. At the RIT-T stage, these factors are considered at a high level through desktop studies. This is because a route for the transmission line (and therefore the potentially impacted communities) is not determined until after the RIT-T process. As a result, some allowance has been made in the cost to accommodate adjustments to the project such as route detours that may later be determined to be needed to mitigate potentially adverse environmental or social impacts.

These important environmental, social and cultural matters will be further investigated and addressed through extensive community and stakeholder consultation as part of design and planning approvals processes (including route refinement). This will avoid and minimise project impacts where possible, while ensuring the project continues to deliver the expected market benefits in the long-term interest of electricity consumers.

PADR assessment

This PADR assessed two different options to provide additional transfer capacity between Victoria and New South Wales and harness low-cost renewable energy resources, which reflects the candidate option identified in the [2022 Integrated System Plan](#) (ISP) and the use of alternative technologies.

The PADR confirms that VNI West would provide a positive net market benefit of approximately \$687 million (in present value terms) over the assessment period, compared to a future without the project.

Following feedback during the first stage of the RIT-T process, the Project Specification Consultation Report (PSCR), the PADR assessment also included combining VNI West with a non-network Virtual Transmission Line (VTL), focused on battery storage. The assessment identified that inclusion of a VTL would not increase the overall expected net benefit due to the present value cost of the batteries exceeding the present value benefit.

PADR analysis

The analysis shows that, compared to a future without this project, the preferred VNI West option is expected to efficiently provide supply reliability and put downward pressure on electricity prices by:

- Reducing and deferring the need for new dispatchable generation/storage investment to meet demand going forward.



- Lowering aggregate fossil fuel usage required for generation to meet demand in the National Electricity Market (NEM) going forward, thereby reducing fuel costs.

Project timing

VNI West is proposed as a staged project:

- **Stage 1: carry out early works immediately, to be completed as soon as possible (approximately 2026).**
 - Early works would include route selection, engineering design, land use planning, biodiversity offset strategy and all environmental approvals that would allow the project to be constructed. It would also include extensive community and stakeholder engagement, allowing an opportunity for local communities to provide feedback on a range of matters that would inform the route development. Early works in New South Wales also includes the efficient construction of the transmission line between Dinawan to Wagga Wagga as part of Project EnergyConnect at 500 kV and operating at 330 kV for the interim period.
- **Stage 2: to complete implementation of the project by July 2031, or earlier with additional support.**
 - After receiving all environmental and planning approvals, this stage would see the project constructed, tested and commissioned.

Call for feedback

We welcome written submissions on the PADR from all stakeholders, including comments on the analysis and ranking of the preferred option. AVP and Transgrid value and encourage feedback across the broad range of issues and opportunities associated with this project.

All forms of feedback will be carefully considered in the preparation of the final report (the Project Assessment Conclusions Report [PACR]). All written submissions will be published online unless marked as confidential, along with a summary of how feedback has been taken into account. If you do not wish for your submission to be made public, please advise at the time of your submission.

Submissions must be received by 9 September 2022 by email to VNIWestRITT@aemo.com.au.

AVP and Transgrid will also host online information sessions to provide a project overview, discuss the economic and technical assessment contained in the PADR, and answer any questions.

These sessions will be held during the PADR consultation period on:

- **Wednesday 10 August, 1.00 pm (AEST) - [Register here](#).**
- **Thursday 25 August, 1.00 pm (AEST) - [Register here](#).**

Contact details

The PADR and further information are available from AVP and Transgrid through the contact details below.

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