

Mr Joe Spurio
Victorian Planning Group Manager
Australian Energy Market Operator

By email to VNIWestRITT@aemo.com.au

Dear Mr Spurio,

Submission to VNI West RIT-T PSCR

AusNet Services welcomes the opportunity to comment on the Project Specification Consultation Report (PSCR) for the Victoria to New South Wales Interconnector (VNI West) Regulatory Investment Test for Transmission (RIT-T) published jointly by AEMO and TransGrid in December 2019.

AusNet Services supports the intent and timing of the VNI West development proposed in this RIT-T. The project will increase interconnection capacity between Victoria and New South Wales, mitigating the risk to Victorian supply reliability in the event of early closure or unavailability of aging Victorian coal-fired generation plant.

The PSCR seeks feedback on specific questions and this submission is structured to respond to each of these questions.

<p>Have AEMO and TransGrid properly described the identified need for this project? If not, how can the description of the need be improved?</p>

The identified need highlights three drivers for this project:

- Maintaining Victorian supply reliability following closure of further coal-fired generation
- Facilitating efficient development and dispatch of new renewable generation
- Enabling more efficient resource sharing between NEM regions.

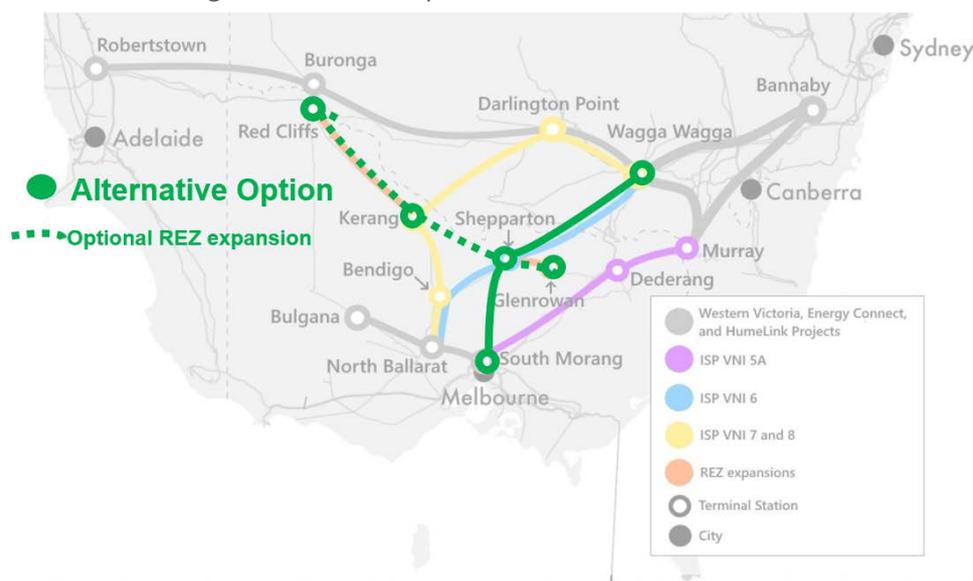
The “identified need” description could be improved by providing a clear description of the relativity and quantum of benefits provided by each driver. AusNet Services understands that most of the project benefits relate to maintaining Victorian supply reliability and if this is the case then the efficient solutions should be considered in this context.

The Victorian transmission system currently has multiple issues that require resolution, including system strength and stability issues, the need for additional network capacity to enable new generation connections and the need for development of future Renewable Energy Zones (REZ). Whilst it is important to consider other network issues that may be improved as a result of resolving the need for supply reliability, there is a risk that trying to resolve multiple issues with one project may result in a sub-optimal solution of all issues. Selection of the most efficient solution to the primary need should be made whilst complementary solutions to other issues are considered in parallel through processes focussed on these separate issues. This assessment may be best served by undertaking further RIT-T processes as required.

Have AEMO and TransGrid considered the most appropriate development options in this PSCR?
 If not, what other credible options should be considered for the PADR?

AusNet Services believes there are other credible options for the VNI West interconnector that should be considered in the RIT-T analysis. Details of an alternative option are provided for consideration by AEMO.

AusNet Services has investigated several alternative options, including the more central option shown in the diagram below. This route is a variation of the ISP VNI 6 route and would connect into the 500 kV network at a new terminal station site north of Melbourne. The route allows possible REZ expansions from Shepparton to the north west via Kerang and on to Red Cliffs as well as potentially east to Glenrowan, intersecting identified REZs with high volumes of interest from renewable generation developers.



Compared to the VNI West options (VNI 6 and VNI 7 & 8) this alternative:

- is shorter in route length and introduces lower electrical losses
- significantly lower in cost due to shorter length and fewer terminal station connections
- is more feasible to build due to Greenfields location of terminal stations
- could be delivered more quickly due to fewer outage constraints and availability of existing land and easements that form part of AusNet Services strategic land holdings
- eliminates the dependency on delivery of the Western Victoria Renewable Integration upgrade project – specifically the new 500 kV link from Sydenham to North Ballarat
- provides other benefits including:
 - improved security of supply to Melbourne by avoiding the creation of a highly critical generation flow path between Ballarat and Sydenham,
 - enables the newly identified V6 REZ in central Victoria
 - alleviates risk to supply as a result of bushfires through route diversity (from existing VNI corridor)
 - allows for future spurs to be constructed to enable further generation in V2 REZ.

AusNet Services supports the accelerated timeline for VNI West, the Draft 2020 ISP recommends delivery by 2026-27, more than 10 years earlier than expected in the 2018 ISP. Project delivery earlier than 2026-27 could be economic, however delivery earlier than this date may not be practicable. In this regard, the evaluation criteria for various options should consider delivery timelines and risk factors that may impact delivery for each option.

The RIT-T currently considers three options for VNI West and indicates that the optimal route will be assessed during the consultation period. We are concerned that the best solution may be one that is not currently being considered, and the interaction between the timelines for the 2020 ISP and the VNI West RIT-T may result in selection of the preferred option before detailed analysis can be completed.

Are there any non-network options that AEMO and TransGrid should consider to meet or partially meet the identified need, for example non-network options with the capability to alleviate constraints and unlock REZ capacity?

AusNet Services is not aware of, or proposing, non-network options that could meet the identified need.

What, if any, additional factors should AEMO and TransGrid consider to determine the preferred option for VNI West?

Additional factors that must be considered in determining the preferred option include:

- Assessment of the feasibility of obtaining **access to land and easements** required for each option
- Requirements for **approvals, consents and impact assessment** across a range of items including:
 - planning approvals
 - environmental consents
 - heritage and cultural heritage impact
 - visual impact and impact on existing infrastructure (e.g. irrigation)
 - productive value of land traversed
 - availability of environmental and vegetation offsets, and
 - likelihood of gaining a social licence to operate.
- **Operational impacts** of this project on existing network function, including the availability of outages both for construction and ongoing inspection and maintenance activities in highly constrained areas of the network
- **Safety** aspects of the construction for various options that may require working within live terminal stations and adjacent to live high voltage transmission lines
- Impact of all the above items on expected **project timing** and **project cost**.

AusNet Services strongly recommends that early works be undertaken in parallel with the RIT-T process to establish boundaries and limitations that may be imposed on specific options and routes by the factors outlined above. Selection of a preferred route based solely on technical evaluation of power flows and desk top assessments will not provide a complete view of relevant



factors and is likely to lead to selection of an option that is at significant risk of not being able to be delivered within estimated time and cost parameters.

As the transmission network owner and service provider for Victoria, AusNet Services has detailed knowledge of existing land and easements that are relevant to this RIT-T, understanding of operational impact and safety aspects for construction of a project of this scale and will continue to work closely with AEMO to ensure these aspects are well understood and considered in the VNI West RIT-T process.

AusNet Services has provided a Confidential submission to the Draft 2020 Integrated System Plan (ISP) consultation that contains material relevant to the VNI West RIT-T. We request that this material also be considered as part of AusNet Services response to the VNI West PSCR consultation.

We would be pleased to meet to discuss our comments and provide further assistance on any of the material provided. Please contact Jacqui Bridge - Manager Transmission Planning and Development to arrange these follow up discussions.

Yours sincerely,

Adrian Hill
General Manager –Transmission
AusNet Services