NEOEN

Mr Nathan White
Manager Victorian Transmission Planning
Australian Energy Market Operator

and

Mr Andrew Kingsmill
Manager/Network Planning
TransGrid

13 March 2020

Lodged via email to: VNIWestRITT@aemo.com.au

Dear Nathan and Andrew,

Re AEMO and TransGrid's Victoria to New South Wales Interconnector West (VNI West) Project Specification Consultation Report (PSCR)

Neoen welcomes the opportunity to make this submission to the joint AEMO and TransGrid PSCR, which as part of the Regulatory Investment Test – Transmission (RIT-T), reviews options for the expansion of the transmission transfer capacity between Victoria (VIC) and New South Wales (NSW).

Neoen is France's leading independent producer of renewable energy, and one of the fastest-growing worldwide, including in Australia. Neoen is a responsible company with a long-term vision that translates into a strategy seeking strong, sustainable growth. We have 2 GW of projects globally in operation and under construction, including in the National Electricity Market (NEM): Hornsdale Wind Farm (309 MW in South Australia); Parkes, Griffith, Dubbo, and Coleambally Solar Farms (combined 255 MW in NSW); Bulgana Green Power Hub (hybrid wind/battery system) and Numurkah Solar Farm (combined 314 MW in VIC); and the Degrussa Hybrid Power System (10.6 MW in Western Australia).

Neoen is also the owner of Hornsdale Power Reserve (100 MW/129 MWh battery system) in SA, which is currently being expanded by 50 MW to become the largest utility-scale energy storage system in Australia.

Our pipeline

Neoen has a rapidly growing pipeline of new generation projects under development across the NEM. Included in this pipeline are several in the area between Shepparton (VIC) and Wagga (NSW) totalling 700 MW, which we are targeting to have commissioned within the next five years.

AEMO would further be aware of other proponents with projects under development in the same area. This shows that there is more than adequate market interest in new renewable energy investment into the coming decade.

Furthermore, with the price of renewable energy continually reducing and forecast to be decidedly cheaper than other more traditional energy sources (such as coal and gas) in the near future, it becomes evident that new transmission capacity is required in the area to deliver market benefits to all.

The identified Need

Neoen agrees with the Need as identified in AEMO's 2018 Integrated System Plan (ISP), and which underpins this RIT-T project.

As outlined in the PSCR, the NEM is undergoing rapid change with the addition of a significant number of new renewable generating systems, which over time will replace ageing coal-fired generators. These new generators tend to be much smaller (tens to hundreds of megawatts) and cover a wider geographical area and more diverse networks (distribution and transmission) than traditional, transmission-concentrated, large coal-fired plant (thousands of megawatts). With (regional) electricity networks becoming more congested, it is vital that renewable sources be able to dispatch their energy across demand centres via stronger interconnections.

A project which is able to both address this Need and provide the right Market Benefits would find support from Neoen.

Identified credible options to address the Need

Regarding the credible options identified in the PSCR, Neoen is of the following view:

VNI 5A (existing VNI corridor)

This option would utilise the existing VNI corridor to increase the interconnector capacity above the capacity increase works to be carried out as part of the recently completed VNI Upgrade RIT-T.

However, as outlined in the PSCR, this option fails to meet two important considerations.

First, the proposed 330 kV line would not assist AEMO to alleviate the issues it has recently identified in the "West Murray Zone" (WMZ) of the NEM, as publicised at recent industry fora and on AEMO's website[1]. VNI 5A,

> *"…will not provide additional transmission capacity in northern and western Victoria, and south-western New South Wales [i.e. the West Murray area], where there is a significant amount of renewable generation development in progress and projected to continue. It therefore provides limited benefits in facilitating the efficient development, dispatch, and sharing of renewable generation in these high quality renewable areas."*[2]

Second, the stated key purposes here are to open up the NEM to more opportunities to access additional renewable generation resources, enhance system strength in such areas, and to build a more capable and resilient network through a suitably meshed transmission system. However, as the PSCR seems to acknowledge, the lack of transmission route diversity under this option would render these benefits all but unachievable without subsequent future investment. In Neoen's view, this presents a significant risk of investing in a project which would bring little benefits (if any), and would likely perpetuate the very issues it is trying to resolve.

Given these considerations, Neoen is of the view that option VNI 5A is not credible and should not be considered further by AEMO and TransGrid in the subsequent stages of this RIT-T process.

VNI 6 (new 500 kV interconnector corridor between North Ballarat and Wagga)

This option – along with options VNI 7 and 8 – would utilise new easements to extend the 500 kV link already running between Sydenham and North Ballarat in VIC up to Wagga in NSW.

The PSCR highlights the multiple desirable benefits of all three of these options, in contradistinction to option VNI 5A. However, Neoen supports VNI 6 in particular because it opens up a significant new renewable energy development area to future network connection opportunities which were unavailable until now.

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[1] See AEMO's West Murray website, <https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/participate-in-the-market/network-connections/west-murray>.

[2] AEMO and TransGrid, *Victoria to New South Wales Interconnector West (VNI West) – December 2019 – Regulatory Investment Test for Transmission Project Specification Consultation Report (PSCR)*, viewed at <https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/victorian_transmission/vni-west-rit-t/vni-west_rit-t_pscr.pdf?la=en>, December 2019.

Options VNI 7 and VNI 8 on the other hand appear to address the other important need to relieve existing constraints. Whilst we do support the need to improve transmission capacity to constrained regions, it is possible to argue that these issues will already come a long way towards being addressed via other RIT-T projects as noted in the PSCR[3], such as Western Victoria, Project EnergyConnect, and HumeLink.[4]

Therefore, Neoen considers that this VNI West RIT-T presents an invaluable opportunity to adopt a forward-looking approach to system design such as that presented by VNI 6. This option complements the above existing projects underway and would go a long way towards delivering a truly open, yet resilient system capable of meeting Australia's longer-term 21st century energy needs.

Conclusion

As outlined above, Neoen agrees with the identified Need being addressed via this RIT–T process.

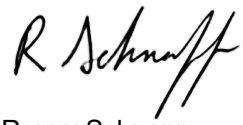
While opposing any further consideration by AEMO and TransGrid of option VNI 5A due to its lack of material benefits and the risk of perpetuating the existing issues, Neoen strongly supports option VNI 6 with its particular benefit of providing for future new renewables connections in new areas over the long term, while complementing other ongoing RIT-T projects to deliver the resilient national transmission system Australia needs.

On behalf of Neoen, I wish to thank you again for the opportunity to contribute this submission to the RIT–T consultation.

Should you have any questions or seek to follow up this submission at any time, please feel free to contact me via email at ronny.schnapp@neoen.com.

We look forward to engaging with AEMO and TransGrid further on this and future consultations.

Kind regards,



Ronny Schnapp,
Network Connections Manager,
Neoen Australia

[3] ibid., Figure 1 on p.6.

[4] See various RIT-T project websites: AEMO's Western Victoria Renewables Integration, viewed at <https://aemo.com.au/initiatives/major-programs/western-victorian-regulatory-investment-test-for-transmission>, ElectraNet's Project EnergyConnect, viewed at <https://www.projectenergyconnect.com.au/>, and TransGrid's HumeLink, viewed at <https://www.transgrid.com.au/humelink>.