Email: admin@qeun.com.au

20 April 2023

Ms Nicola Falcon Group Manager Victorian Planning Australian Energy Market Operator Via email: VNIWestRITT@aemo.com.au

Dear Ms Falcon

RE: Submission on the VNI West Consultation Report – Options Assessment

The Queensland Electricity Users Network (QEUN) appreciates the opportunity to provide a submission to the Australian Energy Market Operator (AEMO) on its VNI West Consultation Report – Options Assessment.

QEUN represents small business and residential consumers with a particular emphasis on regional consumers. We advocate for affordable and reliable electricity from a *resilient* National Electricity Market where the pace of the transition to a renewable energy future is not at the expense of the economy, jobs or reasonable living standards.

QEUN is an energy consumer advocate active at both a state and a national level.

Why should Victorian and non-Victorian energy consumers be concerned about the VNI West Project?

From the outset QEUN would like to address the question - why is a consumer advocate in Queensland providing a submission on VNI West – a proposed \$3.3 billion 500 kV transmission line in Victoria?

Firstly, VNI West is an 'actionable project' in AEMO's Integrated System Plan (ISP).

The ISP is supposed to ensure that all residential and business consumers in the National Electricity Market (NEM) are supplied with affordable and reliable electricity.

Queensland is one of the five states in the National Electricity Market, the others being New South Wales, Victoria, South Australia and Tasmania.

Secondly, Queensland is a signatory to the Australian Energy Market Agreement (AEMA).

The AEMA is an agreement signed by all states and territories of Australia that is supposed to signal the future direction of the energy market would be pursued in a nationally consistent manner.

Energy consumers have watched in disbelief as AEMA signatories implement their individual state-based energy policies with scant regard to the national implications, including what appears to be a competition between states as to who has the highest renewable energy target by 2030.

The lack of a cohesive national approach to the energy market has resulted in skyrocketing power bills and a NEM which could in the near future experience rolling blackouts on a regular basis.

In 2017, Dr Finkel led an *Independent Review into the Future of the National Electricity Market*. The review recognised that it was time to reaffirm the commitment of the states and territories to a national integrated approach.



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One of the 50 recommendations was that all parties should commit to a new AEMA by mid-2018.

It is now 2023 and a new AEMA has not been signed by any state or territory.

The current AEMA allows for the five states in the NEM to "share the pain" of load shedding.

This means state governments with high renewable energy targets unable to meet their state's electricity demand can rely on the states with fossil-fuelled power stations and sufficient short and long duration energy storage to rescue them.

On the weekend of the 1st April 2023, daytime electricity demand in Queensland and New South Wales exceeded 6,000 MW in both states. In Queensland there was zero wind generation for 3 hours on the Saturday and 5 hours on the Sunday. At one stage the combined wind generation for both Queensland and New South Wales was 34 MW. That means with a combined electricity demand of over 12,000 MW, the total contribution from wind farms in Queensland and New South Wales was 34 MW. In this situation building more wind farms would not help, there was simply no wind for the wind farms.

NEM-wide wind droughts have already occurred.

On Friday 26 August 2022 at 14.10 hours, the total wind generation for the 5 states in the NEM was 204 MW. That means wind farms in the 5 states in the NEM supplied 0.98% of NEM demand ie less than 1%.

Queensland still has the youngest most efficient coal-fired power stations in the NEM. Queensland's first coal-fired power station could close in 2028, with total closure of all Queensland coal-fired power stations possible by 2035.

New South Wales will lose about 10% of its electricity generation when the Liddell coal-fired power station closes in April 2023.

Clearly, we need a national approach to ensure all states in the NEM can keep the lights on, and more importantly the wheels of business and industry turning.

Without reliable and affordable electricity Australian jobs will be lost to China, India and other countries.

According to research published by the Centre for Research on Energy and Clean Air and the Global Energy Monitor, China approved the construction of 106,000 MW of coal-fired power stations in 2022 – four times more than in 2021 and the highest since 2015. The research states that this is equivalent to about 100 large coal-fired power stations and enough to supply Great Britain. At least 50,000 MW of the capacity began construction in 2022.

In 2020, Victoria passed legislation that gave the Victorian Energy Minister power to go it alone on transmission planning and investment in Victoria.

The Victorian Government's first step was to ask AEMO to call for expressions of interest to increase the capacity of the Victoria to New South Wales Interconnector. An interconnector is a transmission line that connects two states. VNI West connects Victoria and New South Wales.

On 18 February 2020, the Victorian Energy Minister stated "the vulnerability of the national energy network has been highlighted in recent months, with each of Victoria, New South Wales and South Australia narrowly avoiding load-shedding in late January."



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The Victorian Energy Minister failed to mention that the last load-shedding event in the NEM occurred in Victoria in the previous summer of 2018-19. On that occasion more than 200,000 Victorian consumers were load shed.

Load shedding over two consecutive days was only avoided due to the load shedding of a single industrial customer, the Alcoa Portland Aluminium Smelter. The Portland Smelter produces more than 20% of Australia's aluminium production, employs around 600 people and represents about 10% of Victoria's electricity demand. Portland Smelter can only reduce its electricity demand for a few hours before damage occurs to its production system therefore its ability to prevent or reduce the severity of a load shedding event has strict time limitations.

In January 2019, Victorians were denied the ability to reduce the financial, health and emotional cost of the load shedding event because 90 minutes before rolling blackouts commenced the Victorian Government was still assuring Victorians their lights would stay on.

At the same time AEMO was also still publicly assuring Victorians their lights would stay on.

However, for 200,000 Victorian energy customers the lights did go out.

Following the load shedding event, AEMO's CEO said on the 7.30 Report that the wind in Victoria dropped markedly through the day and that the drop was not seen in AEMO's earlier forecasts.

The January 2019 load shedding event in Victoria would have been considered when the Victorian Government in February 2023 issued a Ministerial Order under the National Electricity (Victoria) Act 2005.

The Victorian Ministerial Order enables AEMO to start early works on the VNI West Project.

The Ministerial Order potentially allows AEMO to build the VNI West transmission line wherever it wants and at any cost. This is because the Ministerial Order can remove the regulatory oversight provided by the Australian Energy Regulator. That's akin to removing the umpire from the soccer game.

Should other states in the NEM replicate the action of the Victorian Government and use a Ministerial Order to potentially avoid regulatory oversight by the Australian Energy Regulator, the consequences to power bill affordability across the NEM will be devastating.

Ironically, despite the massive multi-billion dollar price tag of VNI West, a detailed submission by Professor Simon Bartlett and Professor Bruce Mountain state "an instantaneous and/or prolonged outage of both 500 kV circuits on this transmission line would immediately interrupt Victoria's largest electricity supply, causing a <u>state-wide blackout to Victoria</u> with extensive electricity rationing until the damage is rectified".

Depending on the direction of flow and load at the time of a double circuit outage on VNI West, the outage could potentially cause blackouts in South Australia, New South Wales and Queensland.

Bush fires do cause transmission line outages. With climate change expected to cause more bush fires, it is possible multiple bushfires could cause multiple outages on VNI West – this could result in multiple blackouts in Victoria and in other NEM states.



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Blackouts put the health and emotional wellbeing of Victorians and Australians at risk.

However, the economic damage caused by a single, let alone multiple blackouts, would be crippling to any state economy but particularly to the struggling economy of Victoria.

For example, in 2016 despite the state-wide blackout in South Australia occurring *after 4 pm* on a weekday, a survey of businesses estimated the cost at more than \$360 million. The survey also found that only 37% of businesses had business interruption insurance and of those businesses more than half were not covered for any costs associated with the blackout. Only 12% of businesses had a back-up generator.

Clearly, how the Victorian Government plans and invests in Victorian transmission has direct implications to the reliability and affordability of electricity in Victoria and other NEM states.

Energy consumers across the NEM should be taking an active interest in how the Victorian Government and AEMO are trying to avoid scrutiny by potentially going around the regulatory process for the VNI West Project.

Incorrect assumptions made by AEMO on the VNI West Project have resulted in a better alternative being ignored and therefore possibly overlooked by the Victorian Government.

The incorrect assumptions and the alternative to VNI West have been clearly detailed in the joint submission by Professor Simon Bartlett and Professor Bruce Mountain.

Their submission strongly promotes the development of the Gippsland Renewable Energy Zone (REZ).

They believe there is sufficient solar and onshore and offshore wind capacity in the Gippsland REZ to produce enough renewable electricity to deliver Victoria's transition from coal to renewables without VNI West, the Western Renewables Link (WRL) or Marinus Link.

Their analysis of AEMO's inputs and assumptions for the ISP concluded the construction of VNI West and the adjoining WRL will delay Victoria's transition to renewable energy.

QEUN in its submission to AEMO on its draft inputs and assumptions for the 2024 ISP strongly voiced its concern that AEMO's Generation Information Page (GIP) is chronically outdated.

The GIP is a base document for the 2024 ISP.

Without up-to-date information on publicly announced generation and storage projects it is not possible for AEMO to deliver an ISP that will provide affordable and reliable electricity to Victoria and the NEM.

AEMO's GIP needs to be urgently overhauled and updated monthly to ensure it is a comprehensive list of all publicly announced and proposed generation and storage projects in the NEM.

The overhaul is urgent as a missing project could be the critical piece of the NEM jigsaw.

For example, the proposed 1,500 MW Seadragon Offshore Wind Project in the Gippsland REZ is not listed in the GIP. This project appears to be a little different from other Victorian offshore wind projects as it is working with oil and gas facility operators to assess the potential for onshore & offshore asset re-use.

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Interestingly, Seadragon is looking to produce renewable *baseload* power for the NEM and enable green hydrogen and carbon capture and storage projects to proceed.

The goals of the Seadragon Project need to be noted by AEMO as they may complement or compete with the Hydrogen Energy Supply Chain Pilot Project (HESC) which is also located in the Gippsland REZ. The HESC Pilot Project is the largest hydrogen project in Australia. The Project has received \$50 million each from the Victorian and Federal Governments and about \$400 million from Japanese companies.

The Seadragon Offshore Wind Project received \$2.3 million from the Victorian Government in November 2021. Yet 18 months later the Seadragon Project is not listed as a project in the GIP.

We have some empathy for AEMO in relation to the GIP. It should not be up to AEMO to commit financial resources to keep the GIP updated when all it takes is for local, state and federal governments (that approve energy and storage projects) to provide the project information to AEMO on a monthly basis.

Social licence – who is the responsible entity?

AEMO has maintained there is significant opposition to renewable energy generation in the Gippsland REZ.

Their assumption has been disputed and needs to be investigated as preliminary discussions indicate otherwise.

However, it does beg the question – who is the best placed entity to determine the level of social licence in a REZ?

Is it AEMO or local, state or federal governments or is it the proponent of the transmission project?

The stakeholder engagement strategy currently employed by AEMO on the VNI West Project is certainly not the template for landowner and community engagement.

Conclusion

The VNI West Project is the test case for transmission projects in the NEM.

It is important that signatories to the Australian Energy Market Agreement recognise VNI West is a test case and take a keen interest in the manner in which AEMO and the Victorian Government engages with individual landowners and communities.

As a consumer advocate, our view is the ISP with the inclusion of VNI West cannot deliver reliable and affordable electricity to Victoria or more broadly to the NEM.

This puts at risk the Australian economy, Australian jobs and reasonable living standards.

We urge AEMO to review its assumptions on VNI West and to investigate the development of the Gippsland REZ as an alternative that will transition Victoria to a renewable energy future more rapidly than VNI West.

Yours faithfully

Jennifer Brownie

Coordinator

Queensland Electricity Users Network