

12 February 2026

## FOR PUBLICATION RESPONSE

Australian Energy Market Operator Limited  
By email: ISP@aemo.com.au

Dear AEMO ISP team,

### Draft 2026 ISP – Consultation

We appreciate the opportunity of responding to the Draft 2026 ISP question and wanted to acknowledge the depth of work and careful analysis inherent in the plan.

Syncline Energy Pty Ltd is a leading Australian developer of network augmentation projects that are especially relevant to the 2026 ISP:

**600 MW Melbourne Renewable Energy Hub (MREH)** a 1.6 GWh BESS at the metropolitan Load centre with grid forming capability at the 500kV network level. The project was commissioned in 2025. MREH includes a 500kV HV AC underground connection that runs 1.8 km from MREH to Sydenham Terminal Station (**SYTS**). Stage 2 of the project can deliver a further 2.4 GWh of BESS storage. MREH is now owned by Victoria's SEC and Equis.

**Syncline Community Cable (SCC)**, a 265km long fully underground 525kV HV DC bipole cable with DMR. The project mobilizes additional energy from Victoria's North West REZ and Western REZ and materially improves interconnector flows between Victorian, NSW and SA. SCC has a fully developed, micro-sited route that was agreed with farmers over 18-months following ecology and heritage studies. Syncline completed a tender in late 2024 for the civil works, converters and cable. With Marinus Link, it represents a renaissance of HV DC technology in Australia that follows a global trend. We have a complete understanding of current market costs, risk allocation and development schedules. Inherent in the design for SCC, are the converter stations at Melbourne and in northwest Victoria which will provide:

- System strength and voltage stability support
- Superior power flow control
- Improved resilience against bushfires and natural disasters
- Inertia and RoCoF contribution
- Fault ride through capability and superior fault discrimination
- Black Start capability for Western Victoria, Melbourne and Southern NSW

This is in addition to the 2GW+ energy transfer capability of the cable, which can be delivered with a very high-capacity factor using BESS storage.

**88 MW<sub>p</sub> Bannerton Solar Farm** which required augmentation of 17km of a rural 66kV distribution network, an approach that is now the focus of this ISP.

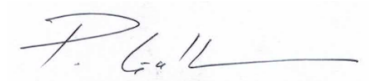
**Victorian AI Hub, a 500 Ha data centre precinct** near the MREH BESS site at the juncture of 5 existing and two planned 500kV transmission lines. Targeting eight data centres with a total of 3.1 GW capacity,

the precinct will have on-site gas generation and power quality equipment to buffer the grid from +/- 40% load swings associated with AI training models. The site will use, process and store reclaimed water from Melbourne's outer suburbs.

If we can provide further details on our response, please call at any time **(0413 640 120)** or email [phil@synclineenergy.com.au](mailto:phil@synclineenergy.com.au).

Yours sincerely

Phil Galloway

A handwritten signature in black ink, appearing to read "P. Galloway", written over a light blue horizontal line.

Managing Director

Syncline Energy Pty Ltd

0413 640 120

## Context for our response:

With the 2026 ISP, AEMO has made a commendable effort to address floors in Australia's network planning process, mainly due to the understated capital cost inputs (which have now more than doubled) and ensuring that the cost of system security is transparent (at A\$3.6 Bn).

However, we think the 2026 ISP includes carry-over projects and technologies in the ODP that were justified on the old approaches and assumptions. Mostly, these legacy projects are still supported on a cost/benefit analysis which is more than a decade old.

Our responses to AEMO's consultation questions below is therefore to address these legacy projects by suggesting that AEMO shift to a "functional" description of the network requirement, rather than defining it by a specific project technology, voltage or corridor. This leaves room for the responsible procurement agencies to genuinely market-test the economics of different solutions up to Final Investment Decision (FID).

Of course, a cost estimate and a design concept is still needed to run the ODP models, but this should not be confused with a fully optimised engineering design or final technology and route selection. That detailed optioneering must come later and is not part of the ISP scope.

Our expectation is that the network stability benefits and speed of project development for buried HVDC projects will provide a superior outcome for electricity consumers and impacted communities compared to AEMO's proposed continued roll out of 500kV HV AC overhead lines. When properly market tested, we also expect that costs will be lower for undergrounding HV DC, particularly in peri urban areas or where trenching costs are low in open flat cropping country. That is the experience across much of Europe, Scandinavia, China and parts of the US.

We appreciate that AEMO (or VicGrid and EnergyCo) will not wish to re-prosecute projects that are to some extent underway. But it must be acknowledged that several projects in the ODP are based on RIT-Ts that are more than a decade old and the project design is difficult to justify on current cost/benefit analysis under current ISP assumptions. This dynamic is to be expected because:

- the economics of generation change - for example cost of offshore v. on shore wind,
- demand forecasts change – load flexible H2 electrolyser v. Data Centres where generation must follow load,
- technology evolves - steep declines in the HV DC and BESS cost curves with massive improvements in capability.

And this all happens at a much faster rate than the project delivery cycle for greenfield transmission.

If AEMO does not transparently re-test the 'anticipated' and 'committed' projects with each ISP, then we risk building a sub optimal set of white elephants at enormous cost to energy consumers. It is not clear in the current VicGrid/EnergyCo and AEMO interactions where that independent and transparent review should take place, but we think the ISP has the most un-biased and global perspective and AEMO should be less caught-out by the sunk cost fallacy.

The claimed need for 'investment certainty' is overblown because any sophisticated generation developer, delivery contractor, TNSP or load customer has already formed a view on these legacy projects with multiple year delays and in some case +800% cost overruns. If anything, poorly justified transmission projects are causing the wrong locational signal to be sent as projects cluster in REZ's with poor wind and solar resource (eg Victoria's Gippsland REZ) and the benefit of interconnector flows from lower cost REZ outside each State is ignored by State government planning authorities.

As detailed in our response below, we think the solution for AEMO to be less prescriptive in the Final 2026 ISP document with respect to project descriptions. Procuring authorities should then be instructed to maintain competitive tension between technology types and route selection for as long as possible up to FID. A selection of the most cost-effective option can then be made on a wholistic assessment of network, operating and community benefits. The small increase in the associated transaction costs will be small compared to the opportunity of reducing the ISP's \$147 Bn cost.

### **AEMO Question 1: - Do stakeholders agree with AEMO's optimal development plan selection in the Draft 2026 ISP? If not, what should be further considered?**

#### **Recommendation 1: - Change VNI West in the Final ISP to show it as an “actionable” functional requirement rather than as currently shown in the ISP as a prescriptively defined \$5.3 to 11.4 Bn project between WRL (at Bulgana) and PEC (at Dinawan) using overhead 500kV HV AC technology.**

The approval process for this line has been complex<sup>1</sup> and engineering optimization work has never really been undertaken. Alternatives are likely to deliver a better result for energy consumers, specifically:

- Use of buried HV DC technology in Victoria to deliver a less convoluted flow path from NSW and the Victorian REZ (V1 and V4) and the NSW Southern REZ (N5) back to Melbourne,
- Lower cost route alternatives
- Use of BESS supported capacity factor improvements for WRL, VNI West and PEC
- Removing single point of failure risk with WRL and VNI West
- Better project staging options
- Quicker project development

For example, the southern half of VNI West could be delivered at lower cost and with much greater network benefits if it were replaced by Syncline Community Cable (**SCC**), a direct 525kV HV DC link back to Melbourne that uses the existing Calder Freeway through peri-urban areas<sup>2</sup>. This would deliver a grid forming converter station and black start capability in North West Victoria while releasing capacity on WRL for further renewable generation in Victoria's West and South West (V2, V3 and V5).

Similarly, the effective duplication by VNI West of PEC for 165km between Dinawan and Moulamein is unlikely to be economic when compared to a more direct 25km connection into PEC and the use of BESS to ensure all lines operate at a high capacity factor (refer Figure 1).

We think that VNI West can be delivered at least 3-years earlier through these changes and save around \$1Bn while delivering a more robust and secure network.

Syncline's suggested approach could also mobilise much lower LCOE generation compared to the ODP. North West Victoria and Southern NSW have among the highest value and most scalable wind and solar resources in Australia due to their diurnal wind patterns, flat land, large farm sizes (with sometimes marginal agriculture) and the opportunity to develop with +1GW scale economies. By focussing only on \$/kW cost, we think the 2026 ISP assumption workbook understates the benefit of these areas to the

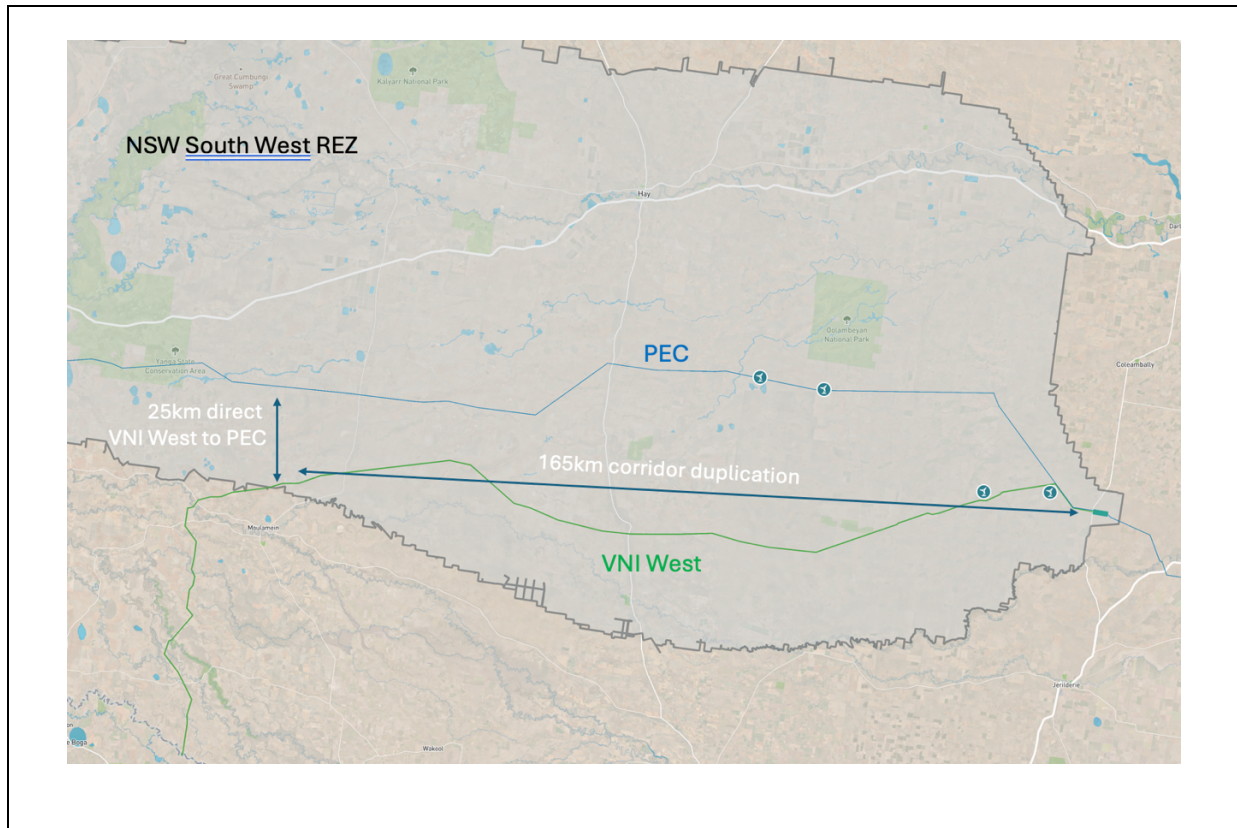
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<sup>1</sup> The RIT-T proponents were Transgrid and AVP (now VicGrid). VNI West was determined to be an actionable ISP project in the 2020, 2022 and 2024 ISPs, but that was based on now out of date and potentially wrong capital costs and delivery schedules. The RIT-T was completed in May 2023. AEMO provided feedback loop confirmation to Transgrid in December 2023 that the project addresses the identified need and aligns with the optimal development path in the most recent ISP. Early works and community engagement and consultation are being undertaken by Transgrid and TCV (now VicGrid). In November 2025, Iberdrola was awarded the contract to design and develop the project in collaboration with TCV/VicGrid and subsequently submit a proposal to build, own and operate the transmission line.

<sup>2</sup> Refer <https://www.synclinecommunitycable.com.au>

NEM’s energy supply. Increasing the output from this vast area will lower wholesale energy prices compared to the Draft ISP which has these REZ materially grid constrained (when compared to developer interest) due to the engineering limitation of the WRL + VNI West combination.

**Figure 1 – Potential shortening of VNI West inn southern NSW**



In the interests of economic efficiency, we propose that the 2026 ISP should identify VNI West only in terms of a functional need that covers: (i) the updated NSW/Vic interconnection capacity identified by AEMO for the current 2026 ISP, (ii) VicGrid’s opportunity to expand Western REZ (beyond 2.4 GW) and North West REZ (beyond 1.7 GW) as these are currently constrained by WRL and VNI West bottlenecks; (iii) Energy Co’s requirements for the South West REZ generation (iv) AEMO’s grid resilience and stability requirements for the link in terms of protecting the States from cascading frequency instability events, voltage control and maintaining operations during natural disasters. This will allow a market solution to be developed for the VNI West requirement with potential to deliver +\$1Bn in savings and superior market and consumer benefits.

Our proposed market testing process should be undertaken in parallel to the VNI West development work that is currently underway. This process will ensure a ‘no regrets’ solution.

**Recommendation 2 – New England REZ Network Capacity.** We agree with characterization of the project and its functional description in the ISP. However, we are less confident that EnergyCo has considered the NSW/Queensland interconnector flow requirement in its transmission procurement process.

AEMO has a vital and unique role in developing the network stability and capacity requirements for transmission where it serves a dual purpose of mobilizing a REZ and providing interconnector support between state. Our experience with VicGrid and EnergyCo is that they are focussed almost exclusively on

their own state's REZ development work. For the New England REZ this means that transmission hub locations and transmission design may not have been optimised for the Queensland/NSW interconnector task.

For example, we think that a grid forming 525kV double circuit HVDC line up to the northern edge of the REZ or into Southern Queensland (supported by BESS) will better serve the energy transfer, grid stability and REZ development task at a lower cost than multiple green field 500kV HV AC overhead systems with 'bolted on' synchrons for grid stability.

By burying spare conduits (like Marinus Stage 1) subsequent expansions of transmission capacity are relatively lower cost compared to duplicating overhead lines in a single 'live' 500kV HV AC corridor as currently proposed. The latest route proposed by EnergyCo is well suited to an underground HV DC option, with only a portion of the route (through steep forestry land up the escarpment) which may require an HV DC overhead line section.

**Recommendation 3 – Add Syncline Community Cable in the category of Future ISP project.**

Syncline's PSS@E modelling shows that our 2GW HV DC link between Melbourne and North West Victoria increases the hosting capacity of VicGrid's REZ and dramatically improves interconnector flows. It would be a critical asset for the mid 2030s in AEMO's 'Step Change' and 'Accelerated Transmission' scenarios.

Including SCC in this way will provide confidence to generators and large customers that grid capacity is being developed to meet Data Centre demand beyond the very modest growth assumed by the Victorian 2025 VTP. (See also Question 3 below).

We note that SCC's inclusion as a future project in the 2026 ISP is appropriate given its longer 20-year time horizon when compared to the VTP's more near term focus of 15-years.

**Recommendation 4 – Sydney Ring both the: (i) “likely actionable” North power flow control, and (ii) South “future” ISP project .** Due to high property values and ecology constraints in this corridor, HV DC technology should be considered as an option for the entire Sydney Ring. The smaller easement size and options for horizontal drilling are likely to deliver opportunities to run HV DC within existing transport corridors. This approach is now common in Europe. Because HV DC converter stations provide grid forming and power flow control as well as energy transfer, we are concerned that splitting the Sydney Ring project in the way shown in the ISP could result in a sub-optimal two-part decision around the appropriate technology and design rather than a wholistic lower cost solution.

**AEMO Question 2: - Do you agree with the proposed timing and treatment of actionable projects in the Draft 2026 ISP?**

**Recommendation 5: WRL cannot be listed as an “Anticipated” project as it has not yet met any of the five commitment criteria<sup>3</sup> set by AEMO. The November 2029 date for full capacity is also not credible as the EES process is still underway and less than 15% of the corridor is apparently secured.**

Such inconsistencies by AEMO undermine the credibility of the ISP process which in turn diminishes confidence in the investment environment for generation, loads and transmission. It also goes against this ISP's stated objectives around building community trust.

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<sup>3</sup> For an Anticipated project, three of five criteria must be met (site acquisition, components ordered, planning approvals, finance completion and set construction timing) Refer AER's Cost Benefit Analysis Guidelines, at [https://www.aer.gov.au/system/files/AER\\_Cost\\_benefit\\_analysis\\_guidelines\\_August\\_2020.pdf](https://www.aer.gov.au/system/files/AER_Cost_benefit_analysis_guidelines_August_2020.pdf).

**Question 3: - What other sensitivities should be considered to test the robustness of the candidate development paths, and why? What other sensitivities are relevant to testing the robustness of investment decisions, why?**

We think that the “Accelerated Transition” scenario is no longer fit for purpose and should instead be replaced with a “High Load Growth” scenario to accommodate data centre growth. AEMO’s consideration of Data Centre demand growth would be consistent with Commonwealth and State government policy supporting the expansion of Australia’s digital economy.

This is a better stress test of the ISP compared to previous work done by AEMO on hydrogen, because that load was assumed to be flexible and follow wind and solar output.

Our concern is that the low forecasts for Data Centre growth will become self-fulfilling as transmission and generation is not built in time under the ISP to support growth. The additional 3.5 TWh in Victoria by 2030 shown in the ISP assumption workbook would reflect construction of only 400MW of Data Centre capacity. This is well short of the State government’s own ambitions.

We therefore recommend that these load forecasts be developed into transparent mid and high load growth scenarios.

As noted below, we appreciate the additional transparency in the data Centre forecast approach provided in the Addendum to the IASR.

**AEMO Question 4: Does the ODP appropriately identify and leverage distribution investment opportunities?**

To some extent. What is missing is that the Final ISP should also make clear that 66kV corridor development supports regional communities and that plans are afoot to build power supply and support economies in regional towns and rural areas. The presentation in the ISP reads like an effort to suck even more power out of the regions and send it to the city. This is a lost opportunity as the energy transition falters unless regional communities can be won back to the cause.

A good example is Syncline’s development of 88 MW<sub>p</sub> Bannerton SF which required reinforcing the 66kV network around Robinvale and Wemen. This materially improved power supply to a key irrigation district.

**AEMO Question 5: Do the gas development projections reflect an appropriate level of investment to support the gas sector, including gas-powered generation in the NEM?**

New Appendix 10 – Gas Development Projections is a very welcome addition.

Consider adding a basic graphic of the available Proved + Probable (2P) gas reserves against the 20-year demand volume for each of the three ISP scenarios. That would provide a signal for further domestic gas reservation as well as investment in exploration and appraisal.

**AEMO Question 6: Do stakeholders have feedback on the Addendum to the 2025 IASR**

We appreciate the additional transparency on the input assumption provided in the addendum. But note that:

- More detail needs to be added to the AEMO cost data base to clarify the services that each costed project is delivering to the network. There is a big difference between, a ‘dumb’ HV AC overhead line (without the cost of reactors, filters and synchrons) and for example a modern HV DC

converter that delivers grid forming capability. The projects will also have different energy transfer benefits, because HV DC can operate at a high annual capacity factor with lower losses.

- We appreciate the added clarity on the Data Centre load forecast process. However, the demand profile looks too low compared to announced projects.