



**EnergyAustralia**

LIGHT THE WAY

28 February 2019

Nathan White  
Manager Victorian Transmission Planning  
Western Victoria Renewable Integration  
Australian Energy Market Operator  
GPO Box 2008  
MELBOURNE VIC 3001

EnergyAustralia Pty Ltd  
ABN 99 086 014 968

Level 33  
385 Bourke Street  
Melbourne Victoria 3000

Phone +61 3 8628 1000  
Facsimile +61 3 8628 1050

enq@energyaustralia.com.au  
energyaustralia.com.au

Dear Mr White,

### **Western Victoria Renewable Integration, Project Assessment Draft Report**

We welcome the opportunity to comment on AEMO's Project Assessment Draft Report (PADR) for the Western Victoria Renewable Integration project under the Regulatory Investment Test for Transmission (RIT-T). We would also like to thank AEMO for running a number of workshops and deep-dive sessions to inform stakeholders of the project.

EnergyAustralia is one of Australia's largest energy companies with around 2.6 million electricity and gas accounts in NSW, Victoria, Queensland, South Australia, and the Australian Capital Territory. We also own, operate and contract an energy generation portfolio across Australia, including coal, gas, battery storage, demand response, solar and wind assets with control of over 4,500MW of generation in the National Electricity Market (NEM).

The NEM generation mix is rapidly changing. Older traditional generation is being retired and replaced more commonly by variable renewable generation. AEMO's 2018 Integration System Plan (ISP) identified that due to the continued development of renewable generation in Western Victoria, transmission investment is likely needed to improve access to renewable generators and remove congestion in the area<sup>1</sup>.

Customers pay for any network investment and bear the investment risk therefore it is important that any long-term network investment and its projected benefits is sufficiently scrutinised to ensure customers benefit from their investment.

EnergyAustralia expects that transparent and clear modelling, results, sensitivities and scenarios will be presented in the Project Assessment Conclusion Report (PACR) to allow stakeholders to be satisfied that the preferred option is in the best interest of customers.

### **Assumptions**

The PADR uses the assumptions from the 2018 ISP for the modelling to determine the preferred option. AEMO is also currently running a 2019 Planning and forecasting consultation<sup>2</sup> which will be used to inform its ongoing publications including the NEM Electricity Statement of Opportunities (ESOO) and the next ISP. Given that the assumptions and scenarios from this process are aiming to be finalised by late April

---

<sup>1</sup>AEMO 2018 ISP, page 8, [https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning\\_and\\_Forecasting/ISP/2018/Integrated-System-Plan-2018\\_final.pdf](https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/ISP/2018/Integrated-System-Plan-2018_final.pdf)

<sup>2</sup> <https://www.aemo.com.au/Stakeholder-Consultation/Consultations/2019-Planning-and-Forecasting-Consultation?Convenor=AEMO%20NEM>

2019, it is our view that this new set of information should be used in updating the modelling for the PACR as far as the timeframe allows. AEMO should also clearly identify key assumptions that have changed between the reports and any significant impact on the market benefits across scenarios that these may have had.

The PADR modelling uses a discount rate of 6% (real, pre-tax) for the net present value analysis (NPV). This has been chosen as it reflects a typical regulated weighted average cost of capital (WACC) for Transmission Network Service Providers (TNSP's). This discount rate may be appropriate for cost recovery of a regulated asset base but as customers are being asked to bear any risk that the forecast benefits of the project do not eventuate this discount rate should be significantly higher. We would suggest a market discount rate at least 3-4% higher is more reflective of the additional risk that customers are required to bear for these long-lived projects. Sensitivities should also test a higher discount rate again (i.e +2.5% that is currently tested in the PADR) to further test the impacts and robustness of the credible options.

The PADR modelling scenarios consider a VRET target of 40% by 2025 as detailed in the 2018 ISP assumptions book<sup>3</sup>. Given recent state election results and current indications of further changes to VRET<sup>4</sup>, we would encourage that the second stage of the state governments renewable energy policy (50% renewables by 2030) should also be modelled as a sensitivity.

### **Additional modelling outputs required**

It is imperative that AEMO provides to participants as much information as possible on the modelling outcomes to support the PACR. For example, it is important that the Plexos model outputs (or similar) are available to participants. This ensures that stakeholders can complete a critical review of the modelling outcomes and understand how the benefits are realised. It is not enough to simply provide generator expansion plans at a high level (for example) without further supporting information that allows stakeholders to explore the drivers of these expansions. While it is beneficial to have a breakdown of the yearly market benefits (and costs) of the network options it does not provide any additional information on how these market benefits are derived. The modelling results provided around generator expansion and retirement allows for an understanding of the location, time and type of generation changes, but to verify these outputs additional information needs to be provided on how existing and new plant is dispatched.

The PACR also needs to be explicit about whether the results are driven by outcomes from modelling itself or whether any outcomes were fixed input assumptions. For example, in generator expansion modelling does the model choose what replacement technology/plant is built or is the model guided to build to a certain end state by input assumptions? It is important for stakeholders to be able to understand the drivers behind the model's results.

Customers are funding these network expansions and TNSP's, in this case AEMO need to be absolutely transparent in presenting modelling results and supportive information to

---

<sup>3</sup> [https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning\\_and\\_Forecasting/ISP/2018/2018-Integrated-System-Plan--Modelling-Assumptions.xlsx](https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/ISP/2018/2018-Integrated-System-Plan--Modelling-Assumptions.xlsx)

<sup>4</sup> <https://www.theage.com.au/politics/victoria/labor-dials-up-its-renewable-energy-target-to-50-per-cent-by-2030-20181107-p50emw.html>

allow interrogation of the outcomes themselves to ensure that the 'business case' for network expansion is as robust as possible.

### **Preferred option**

From the information provided on the market benefits EnergyAustralia observes that while option C2 provides higher benefits across some scenarios the second 'best' option B3 appears to be more robust across the sensitivities. For example, by increasing the discount rate by 2.5% option B3 provides higher market benefits in all cases except for the early coal retirements case. The benefits of C2 (above B3) are reliant on transmission capital benefits stemming from potential future network developments and any increase in project costs, for example due to challenges in obtaining 500kV easements may reduce the market benefits of this option. We would encourage AEMO to further explore the robustness of the market benefits across credible options, for example considering the impact of several sensitivities changing in parallel.

While AEMO has indicated that the cost of outages is most relevant for option B4<sup>5</sup> it would be beneficial to stakeholders for AEMO to present a summary of potential outage costs for all credible options (if any). We note that there are currently significant outages required for minor upgrades in the western Victoria region for projects under the Network Capability Incentive Project Action Plan (NCIPAP).

### **Conclusion**

We look forward to reviewing the PACR for the Western Victoria Renewable Integration project. EnergyAustralia expects that transparent and clear modelling, results, sensitivities and scenarios will be presented to allow stakeholders to be satisfied that the preferred option is in the best interest of customers. Sufficient supporting information must be made available for stakeholders to be able to understand the drivers of the market benefits and how these are realised.

Customers pay for and bear the risk that long-term network assets do not deliver the promised benefits and AEMO needs to satisfy stakeholders that the preferred option is in the best interest of customers.

If you would like to discuss this submission, please contact **Andrew Godfrey on 03 8628 1630** or **Andrew.Godfrey@energyaustralia.com.au**.

Regards

Sarah Ogilvie  
Industry Regulation Leader

---

<sup>5</sup> Page 43, [https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning\\_and\\_Forecasting/Victorian\\_Transmission/2018/Western-Victoria-Renewable-Integration-RIT-T-PADR.PDF](https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/Victorian_Transmission/2018/Western-Victoria-Renewable-Integration-RIT-T-PADR.PDF)