

16 February 2023

Mr Daniel Westerman
CEO, Australian Energy Market Operator
Lodged by email to: forecasting.planning@aemo.com.au

Dear Mr Westerman,

Response to *Draft 2023 Inputs, Assumptions and Scenarios Report*

The Clean Energy Investor Group (CEIG) welcomes the opportunity to provide feedback on the Australian Energy Market Operator (AEMO)'s *Draft 2023 Inputs, Assumptions and Scenarios Report* (Draft IASR) published on 16 December 2022.

CEIG represents domestic and global renewable energy developers and investors, with more than 16GW of installed renewable energy capacity across more than 76 power stations and a combined portfolio value of around \$38 billion. CEIG members' project pipeline is estimated to be more than 46GW across Australia. CEIG strongly advocates for an efficient transition to a clean energy system from the perspective of the stakeholders who will provide the low-cost capital needed to achieve it.

As part of our goal to accelerate renewable energy development to achieve a zero-emission grid by 2035, CEIG commissioned Baringa Partners to develop a series of policy positions on the future of transmission planning and investment in the National Energy Market (NEM). Our submission draws upon the findings of Baringa's *Transmission planning and investment for clean electricity Report*¹ (the Baringa Report) published on our website.

KEY POINTS

- The IASR is vital for investors as the AEMO publications that flow from this work give investors economic information on which to base clean energy investment plans.
- CEIG welcomes the inclusion of recent significant announcements by federal and state governments within the Draft IASR.
- Considering the Commonwealth Government's commitment to the Paris Agreement, CEIG is disappointed that only one out of four scenarios is 1.5 degree compliant.
- CEIG recommends that AEMO plans more significantly for emission reductions consistent with maintaining warming under 1.5 degrees.

¹ <https://ceig.org.au/advocacy/transmission-planning-and-investment/>

- CEIG is calling for the inclusion of more than one scenario that is 1.5 degree compliant so there is better consistency with international investor expectations and trading partner actions.
- CEIG welcomes the establishment of the Advisory Council on Social Licence to assist in understanding social licence issues facing the energy transition.
- CEIG supports the development of a social licence-related sensitivity in the ISP.

Our approach is based on the [Clean Energy Investor Principles](#) (Investor Principles) that CEIG published in August 2021. Crucially, CEIG's *Investor Principles* present the investor case for why governments and the market bodies should adopt planning scenarios that reflect scientific consensus and international sentiment. The research commissioned for the *Investor Principles* found that improving certainty for investors will reduce the risk premium for new generation in the NEM that could deliver savings of up to \$7 billion out to 2042.

The IASR is critical for the development of AEMO's *Electricity Statement of Opportunities*, *Gas Statement of Opportunities* and *Integrated System Plan* (ISP) and therefore is vital for investors as these publications give investors economic information on which to base clean energy investment plans. We commend AEMO on the work it has done on the draft IASR.

Support for 1.5 degree aligned scenarios as they match international investor sentiment

Investors consider both existing and announced policy when assessing the revenue potential of future assets. As such, CEIG welcomes the inclusion of recent significant announcements by federal and state governments within the Draft IASR.

However, under the Paris Agreement, Australia has committed to pursue efforts to limit temperature increase to 1.5 degrees. Although there have recently been several important energy and emission policy announcements from federal, state and territory governments these policy announcements are currently insufficient to meet 1.5 degrees.

For example, Table 6 from the Draft IASR shows how although the Victorian Government's pre-election commitments are more ambitious than a 1.8 degree aligned scenario, they fall short of the ambition required.

Table 6 Victorian emission reduction outcomes from multisectoral modelling compared to Government targets

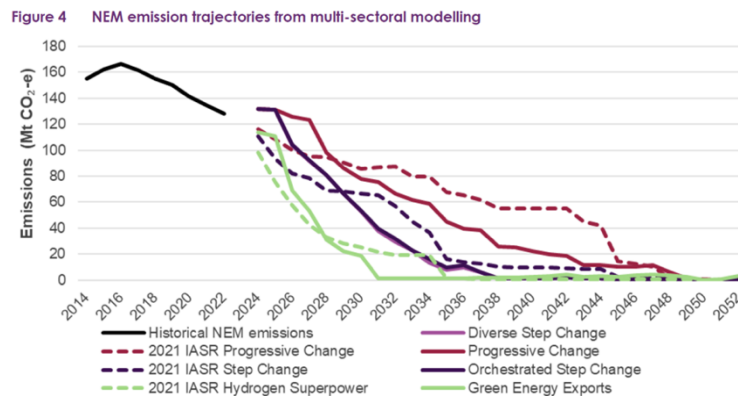
	Status	1.8°C Orchestrated Step Change	Victoria targets	1.5°C Green Energy Exports
2025	Legislated	-	28-33%	-
2030	Legislated	47%	45-50%	66%
2035	Announced*	66%	75-80%	84%
2045	Announced*	80%	100% (Net zero)	95%

*These targets were announced as a pre-election commitment by the Victorian Government in October 2022.

Source: Draft IASR (AEMO)



Furthermore, Figure 4 from the Draft IASR shows that only the 1.5°C Green Energy Exports scenario is consistent with 1.5 degrees despite all scenarios including current policy such as the Queensland Renewable Energy Target of 80 per cent renewables by 2035, the Victorian Renewable Energy Target of 95 per cent by 2035 and Tasmania and NSW gigawatt targets. 1.5 degrees is only achieved within the Green Energy Exports scenario due to increased levels of key demand drivers, technological improvements and other key parameters.



Source: Draft IASR (AEMO)

CEIG has previously supported the selection of the Step Change scenario in the draft 2022 ISP however, noted that it does not go far enough.² The Draft IASR contains four scenarios and only the 1.5°C Green Energy Exports scenario is consistent with limiting temperature rise to 1.5 degrees.

International investor sentiment is moving ever more clearly in favour of clean energy and climate action. CEIG has reviewed the science and formed a position that Australia should set targets for net zero by 2035 for the electricity generation sector and no later than 2040 for the rest of the economy. The Australian Academy of Science recommends that “Australia accelerates its transition to net zero GHG [greenhouse gas] emissions over the next 10 to 20 years” and that “reaching net zero emissions by mid-century is an absolute minimum”.³ The Climate Council recommends that Australia should reduce emissions by 75% below 2005 levels by 2030 and net zero by 2035.⁴ Climateworks Australia recommends that Australia should reach net zero by 2035.⁵

CEIG strongly welcomes AEMO bringing the Hydrogen Superpower scenario (from the 2022 ISP) more in line with market expectations and changing the name to the ‘1.5°C Green Energy Exports’ scenario. Furthermore, CEIG supports the inclusion of linking temperature increases within the scenario naming convention as this provides the market with a clear understanding as to the climate impacts of the scenario.

² [CEIG response: AEMO Draft ISP 2022 final](#)

³ Australian academy of science (2021) *The risks to Australia of a 3°C warmer world*, pp. 13, 11

⁴ Flannery et al. (2021) *From Paris to Glasgow: a world on the move*, p.45

⁵ Butler et al. (2020) *Decarbonisation futures: Solutions, actions and benchmarks for a net zero emissions Australia*, p.79

Considering the Commonwealth Government's commitment to the Paris Agreement, CEIG is disappointed that only one out of four scenarios is 1.5 degree compliant and CEIG recommends that AEMO plans more significantly for emission reductions consistent with maintaining warming under 1.5 degrees.

The inclusion of more than one scenario that is 1.5 degree compliant would be more consistent in aligning with international investor expectations and trading partner actions. For example, the Draft AEMO 2022 ISP included a sensitivity on how 'Strong Electrification' could meet Australia's commitments under the Paris Agreement for a 1.5 degree trajectory without relying on the significant growth of green hydrogen exports. The 1.8°C Orchestrated Step Change scenario could be recalibrated to include stronger policy settings across areas such as electrification, electric vehicles, coal closures or energy efficiency to ensure it meets a 1.5 degree trajectory.

CEIG supports the inclusion of a sensitivity for social licence

Not getting social licence right is likely to lead to project delivery delays and potential late-stage cost changes as additional hurdles are encountered at the planning and environmental approvals stage, leading to increasing costs to consumers.

CEIG notes that other stakeholders such as RE-Alliance have also highlighted the importance of getting social licence right:

"Without an adequate social licence, some of the ISP transmission projects may not be built, or not built in a timely way, or may be forced onto communities unwillingly. These are not desirable outcomes, nor are they desirable for consumers for whom ISP projects should be delivering long term savings. Community benefit sharing can alleviate many of these issues and make new transmission assets more welcome in rural communities."⁶

The Baringa Report notes that, despite the growing awareness of the need for early and ongoing community engagement and the importance of social licence, the costs and timeframes for building and maintaining social licence (and the cost and delay that comes with failing to achieve community support for projects) are not currently central considerations in ISP modelling, or in the RIT-T.

Baringa found that there are shortcomings within the current national economic regulatory framework for transmission whereby specific measures to accommodate social licence initiatives and broader environmental and planning considerations may be undervalued.

This was supported in the Draft 2022 ISP, where AEMO noted that "the sector continues to underestimate the time and money that community consultation requires, with the rules placing it 'at the back end' rather than the front of the process".⁷

⁶ RE-Alliance, 2022, Submission to AEMC's Transmission Planning and Investment Review Consultation Paper

⁷ AEMO, 2021, Draft 2022 ISP, p89

Baringa put forward a policy recommendation on social licence⁸ **requiring AEMO to develop a social licence-related sensitivity in its ISP** to introduce a quantitative assessment of social licence in the national planning and economic framework. This could include developing a methodology for assessing and costing social licence in the market.

This will introduce a quantitative assessment of social licence in the national planning and economic framework and create a methodology for assessing and costing social licence in the market. It is important for the definition of social licence to be broad enough to incorporate environmental and biodiversity concerns as well as considerations for offshore wind.

-CEIG supports Baringa's recommendation to require AEMO to develop a social licence related sensitivity in its ISP. Additionally, CEIG also provides support for the development of sensitivities that cover discount rates, offshore wind and smoothed infrastructure as well as any other sensitivities which can provide investors with a more realistic view of the energy transition to assist in making investment decisions such as the inclusion of stronger policy support for long-duration energy storage.

Furthermore, CEIG welcomes the establishment of the Advisory Council on Social Licence to assist in understanding social licence issues facing the energy transition.

CEIG thanks AEMO for the opportunity to provide feedback on its Draft paper and looks forward to continued engagement on those issues. Our Policy Director Ms. Marilyne Crestias can be contacted at marilyne.crestias@ceig.org.au if you would like to further discuss any elements of this submission.

Yours sincerely,



Simon Corbell
Chief Executive Officer and Chairperson
Clean Energy Investor Group Ltd
w: www.ceig.org.au

⁸ A more detailed analysis of the key advantages, risks and challenges can be found within the attached Baringa Report.