

7 November 2024

Mr. Ashwin Raj
Project Leader
Australian Energy Market Commission
Lodged online on the [AEMC website](#)

Dear Mr Raj,

Response to AEMC’s draft rule determination on Better integrating gas and community sentiment into the ISP

The Clean Energy Investor Group (CEIG) welcomes the opportunity to provide feedback on the AEMC’s draft determination on Better integrating gas and community sentiment into the ISP published in September 2024.

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 future on behalf of the investors who will provide the low-cost capital required for this transition.

Key Points

- **CEIG supports the proposed measures to improve the analysis and projections of gas in the ISP.**
- **CEIG welcomes the requirement for AEMO to clarify inputs, assumptions, and scenarios in its gas projections.**
- **CEIG believes that utilising gas information under the NGR will enhance consistency and transparency** and help align the GSOO and ISP.
- CEIG urges AEMO to **reassess the projected quantum of new gas plant capacity in the 2024 ISP**, as it appears to be overstated.
- Evidence of **under-reported methane emissions** suggests that improve modelling in CSIRO and ClimateWorks multi-sector analysis **could lower the emissions budget, limiting the justification for new gas capacity in the ISP.**

- **CEIG advocates for a greater focus on the pipeline of utility-scale storage and other solutions** and suggests that additional gas capacity should be a last resort.
- In principle, **CEIG supports the draft determination to exclude amendments for better integrating community sentiment into the ISP** in the draft rules but **urges that these considerations are not overlooked in the ISP development process as a result.**
- **CEIG stresses the need for AEMO to improve weather data modelling** to improve forecasting of reduced renewable generation periods and facilitate more effective planning for deep storage solutions.

GENERAL COMMENTS

The Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP) offers a comprehensive roadmap that strengthens investor confidence and highlights the transformative potential of clean energy investments.

CEIG commends AEMO for highlighting renewable energy as the most cost-effective option to meet Australia's electricity needs and climate goals. However, CEIG notes the challenges outlined in the ISP, particularly delays in planning and environmental assessment that impede renewable energy investment. CEIG urges decision-makers to make these processes more efficient and promptly implement the ISP's recommendations to support Australia's Paris Agreement commitments and accelerate the energy transition.

CEIG understands that the Australian Energy Market Commission (AEMC) is proposing to expand the consideration of gas market data in the ISP. CEIG values this initiative to improve the ISP's relevance in an evolving energy landscape.

Better integrating gas into the ISP

CEIG supports the draft rules requiring AEMO to include more detailed gas analysis in the ISP, such as gas development projections and related data. These changes would enable a more accurate and reliable Optimal Development Path (ODP) and help identify the lowest-cost electricity infrastructure options for consumers.

CEIG understands that the proposed rules would also allow AEMO to access and use gas information obtained under the National Gas Rules (NGR) for ISP modelling, subject to confidentiality requirements. CEIG welcomes this, as well as the requirement for AEMO to clearly outline the inputs, assumptions, and scenarios used in its gas projections.

CEIG believes that using gas information under the National Gas Rules (NGR) will improve consistency and transparency and help align key publications like the GSOO and the ISP.

Additionally, we recommend that AEMO make the GSOO model publicly available, similar to the Electricity Statement of Opportunities (ESOO) and ISP. This would further improve transparency by enabling stakeholders to examine and understand the model dynamics, particularly in relation to their interactions with electricity market modelling.

Re-evaluate the quantum of new gas plant capacity

CEIG urges AEMO to reassess the projected quantum of new gas plant capacity in the 2024 ISP, as it appears to be overstated.

CEIG believes that improving gas modelling in the ISP will likely decrease the requirement for new gas peaking capacity by better accounting for infrastructure and resource limitations. This was evident in the 2024 ISP, where improved modelling between the draft and final versions led to the reduction in projected peaking GPG.

Additionally, there is increasing evidence that fugitive methane emissions are being systematically under-reported¹. Improved modelling of these emissions should be incorporated into the multi-sector modelling conducted by CSIRO and ClimateWorks. This may reduce the emissions budget and thereby limiting the justification for new gas capacity in the ISP.

Better integrating community sentiment into the ISP

CEIG understands that the AEMC has decided not to include specific amendments for better integrating community sentiment into the ISP in the draft rules, as the National Electricity Rules (NER) already provide AEMO with the flexibility to consider community sentiment in the ISP and request information from transmission network service providers (TNSPs). Additionally, CEIG notes that AEMO and TNSPs can also share information regarding community sentiment and local sensitivities through the existing joint planning provisions.

In principle, CEIG supports the draft determination to exclude these amendments, based on the reasons provided. However, we acknowledge that the existing rules do not require AEMO to consider community sentiment toward transmission projects in the ISP, and TNSPs are not obligated to share information about community concerns with AEMO to inform the ISP development process.

Social licence and community opposition can significantly delay project assessment timelines, which in turn impedes the energy transition. Therefore, these factors should be critical considerations in the ISP and should not be overlooked as a result of excluding them from the rule change.

Need to improve weather data modelling

In addition to better incorporating and forecasting gas in the ISP through improved data, CEIG underscores the need for AEMO to enhance its weather data modelling capabilities due to uncertainties in energy demand forecasting and weather prediction. We recognise AEMO's modelling in the 2024 ISP was based on 12 different weather reference years². However, we recommend that AEMO include major renewable droughts from the past 30

¹ Climate Council (Jul-24) [Dangerously Overlooked: Why we need to talk about methane](#)

² AEMO (Jun-24) [Appendix 4. System Operability](#)

to 50 years in its analysis, such as the winter of 2010³. This expanded dataset would improve understanding of weather patterns affecting renewable energy sources, particularly wind and solar generation.

In 2022, researchers from Griffith University modelled 42 years of real-world weather data and found no evidence of extended periods of low VRE production in the NEM, noting that a 30 percent reduction in expected energy generation from renewables represents the most severe two-week VRE drought historically recorded⁴.

By incorporating similar long-term weather data, AEMO can better forecast periods of reduced renewable generation, thereby supporting effective planning and decision-making for deep storage solutions. This would also enhance the resilience of the energy grid and promote a more reliable, sustainable energy supply while reducing dependence on gas backup by proactively addressing vulnerabilities in renewable energy generation.

CEIG thanks the AEMC for the opportunity to provide feedback on its draft rule determination and looks forward to continued engagement on these issues. Our Head of Policy and Advocacy can be contacted at marilyne.crestias@ceig.org.au if you would like to further discuss any elements of this submission.

Yours sincerely,



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³ Andy Boston et al (Mar-22) [Characterisation and mitigation of renewable droughts in the Australian National Electricity Market](#)

⁴ Gilmore, J. et al. (Jul-22) [Quantifying the risk of renewable energy droughts in Australia's National Electricity Market \(NEM\) using MERRA-2 weather data](#)