

ECMC Statement on Integrated System Plan Policy Direction

At its meeting of 1 March 2024, the Energy and Climate Change Ministerial Council (ECMC) agreed to the recommendations of the review of the Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP). This review considered opportunities to enhance the effectiveness of the ISP and support the transition of the National Electricity Market to net zero by 2050.

This statement provides clarity to AEMO and to all stakeholders regarding ECMC's preferred policy directions for the ISP and expectations for implementation of the review's recommendations. It is intended to provide AEMO with clarity on the recommendations, particularly in the context of its preparations for the 2026 ISP and development of associated methodologies. An important finding of the review was that AEMO has significant expertise in the development and application of energy system modelling approaches. ECMC expects that AEMO will apply this expertise in implementing the recommendations of the review set out in this statement and will do so in a manner consistent with existing processes for methodology development.

ECMC recognises the statutory frameworks that direct AEMO's development of the ISP and its National Transmission Planner functions. For clarity, this statement is not intended to direct AEMO to act in any way that is inconsistent with these frameworks. Additionally, ECMC recognises that the recommendations summarised below should be seen as 'best intentions', and are not fully within AEMO's remit to implement in the timeframes stated, as they are subject to necessary changes to the National Electricity Rules, a process which takes considerable time.

Integrating gas into the ISP

AEMO should expand its consideration of gas market conditions and work closely with industry stakeholders to develop and publish 'development projections' for the gas sector in the 2026 ISP, to deliver a more rigorous assessment of gas market conditions, and in turn inform private sector investment to support the dispatchable electricity requirements of a net zero electricity grid.

ECMC expects the 2026 ISP to include but not be limited to:

- additional analysis of future gas demand and gas pricing
- projections about the future utilisation of gas infrastructure
- information about dates of expected gas pipeline or GPG closure or conversion
- medium- and long-term projections of gas generator fuel costs
- more information about how ISP modelling scenarios are integrated in its gas supply model.

AEMO should use the gas development projections in combination with its electricity sector modelling to iteratively identify and analyse cost/benefit trade-offs of projects across the two sectors, to support development of the ISP. In this way, the gas development projections would inform market participants and policymakers about the investments that need to be made in the electricity sector, given the likely future path of the gas sector.

ECMC considers that there is some flexibility in the existing regulatory framework, which may be sufficient to accommodate these changes. However, ECMC intends to progress amendments to the National Gas Rules and National Electricity Rules necessary to ensure the provision of information to support the additional analysis and to remove any ambiguity in relation to AEMO's authority to undertake this analysis in the ISP. To the extent permissible under the existing regulatory framework,

ECMC expects AEMO to commence the necessary actions to support integration of gas market considerations in 2026 and ahead of the referenced rule change process.

Enhanced energy demand forecasting

AEMO should provide a greater focus on how demand uncertainty affects development path outcomes in the 2026 ISP, particularly given the rapid evolution and technological opportunities expected through consumer energy resources (CER) and other distributed resources. Improved analysis in the ISP of opportunities to enhance demand-side participation in the market may reduce the future cost of providing energy.

In implementing this recommendation, ECMC expects AEMO to:

- undertake targeted stakeholder engagement to develop more robust assumptions underpinning CER and distributed resources projections in the ISP including developing a comprehensive view of initiatives affecting CER and distributed resources uptake and evaluating the implications for operational demand
- analyse how electrification and CER and distributed resources development sensitivities affect operational demand projections and consider these directly in the ISP modelling
- analyse how Distribution Network Service Providers' (DNSP) investments, programs and annual plans, may impact CER and distributed resources development, and thereby the optimal development path for transmission, and include these findings in the ISP in order to send clearer signals to inform DNSP planning
- develop a framework, methodology and guidance material to support DNSPs and jurisdictions to develop projections and undertake analysis in a consistent manner to support the ISP's development
- include a sufficiently detailed statement in the 2026 ISP, and subsequent ISPs, aimed at informing the market and policy makers about the expected development of CER and distributed resources to provide a baseline for the identification of opportunities to promote the uptake of CER and distributed resources within each jurisdiction.

AEMO should also work together with jurisdictions to ensure that the provision of key inputs for the 2026 ISP includes information about relevant jurisdictional policy developments and scenarios and projections about industrial and consumer electrification demand in NEM sub regions.

Changes to National Electricity Rules are being pursued that will support AEMO's expanded analysis of CER opportunities and require the ISP to include a CER and distributed resources statement. AEMO may be able to progress actions to give effect to the recommendations ahead of rule amendments being finalised.

Demand-side development projections

A truly integrated, whole-of-system plan requires effective consideration of opportunities on both sides of the market. In this context, ECMC considers that the ISP would ideally consider trade-offs between small-scale investments in CER against investments in renewable generation and storage, the wholesale market, distribution networks, and transmission infrastructure, including:

- the opportunities for demand-side participation
- how network investments affect the availability of CER to the energy market

- the opportunity to avoid large-scale generation/storage and network investments through enhancing CER.

ECMC is mindful of the challenges presented by the rapidly evolving data environment in accurately trading off demand-side investments against better established investments in generation, transmission and storage. As a result, ECMC expects AEMO to work with the System Planning Working Group under the National Energy Transformation Partnership and with relevant stakeholders, including DNSPs, to develop a suitable approach to trade off the cost of unlocking increasing tranches of orchestrated CER and distributed resources against other investment options for use in the earliest ISP practicable. Such analysis would promote least cost delivery of electricity, in the long-term interests of consumers.

ECMC expects that changes to the National Electricity Rules and associated guidelines may be required to support this new and additional analysis in the ISP and will work with AEMO to ensure that these changes are progressed.

Enhancing consideration of energy storage and renewable generation

AEMO should enhance the presentation of analysis and provision of information in the 2026 ISP and future ISPs to better assist market participants in developing generation and storage projects including deeper analysis of thermal generation shutdowns, enhanced analysis of system security constraints, and improved locational information in the ISP. ECMC expects this to include:

- analysis of the sensitivity of the optimal development path to alternative coal-fired generation shutdown scenarios, allowing for consideration of facilitating investments in firming capacity and including this more prominently as part of the ISP narrative, subject to appropriately managing commercial sensitivities
- centralising the available information on renewable generation and storage, such as by summarising important material from other relevant documents in the ISP and/or including links to other relevant documents in a manner that facilitates easy access for stakeholders
- greater consideration of system security trade-offs for assessing the optimal mix of generation, storage, transmission and other infrastructure.

Process changes to improve the transparency, accessibility and deliverability of the ISP

AEMO should progress changes to processes to improve the transparency, accessibility and deliverability of the 2026 ISP and future ISPs. ECMC expects AEMO to:

- develop and publish clear, structured and transparent guidelines for its consultation process with jurisdictions around consideration of policy inclusion in the 2026 ISP modelling
- provide more clarity on if and how uncertain or unfunded policies are considered in the 2026 ISP to enhance stakeholder understanding and engagement
- working with the System Planning Working Group, develop additional targeted communications products and activities to support community groups and consumers to engage with the ISP planning process, separate to the ISP document itself, and informed by a communications strategy
- have regard to community input in the identification of the ODP, and consider existing and available data on community sentiment, where available

- take advantage of the significant focus being given to environmental and regional planning for energy infrastructure, improving data on supply chain limits, workforce constraints and community sentiment, and consider where the outputs of this work can be incorporated into the ISP
- increase the visibility of the latest Forecasting Assumptions Update on its website, linked clearly from material relating to the ISP.