

6 November 2025

Ms Anna Collyer
Chair
Australian Energy Market Commission
Level 15, 60 Castlereagh Street
Sydney NSW 2000

Via online submission: ERC0406

Dear Ms Collyer

Clarifying the treatment of jurisdictional policies and system costs in the ISP Consultation paper

AEMO welcomes the opportunity to comment on the *Clarifying the treatment of jurisdictional policies and system costs in the ISP* Consultation paper, which seeks feedback on the issues raised by the proponent regarding the treatment of jurisdictional policies and system costs in the Integrated System Plan (ISP).

AEMO makes the following key points in this submission:

1. The purpose of the ISP is to set out the mix of generation, storage and network investments required to meet both consumer needs and government energy and emissions targets between now and 2050¹. The setting of government policies is a matter for Governments and is informed by a range of economy-wide factors and considerations. It is not the role of the ISP to assess the benefits or appropriateness of government policies, but to set out the optimal pathway to achieve these policies within the context of the National Electricity Market (NEM). Any changes made to the Rules and/or Guidelines should align with this purpose.
2. Since the ISP was first developed in 2018, AEMO has continued to work with industry, governments and consumer advocates to evolve the scope and approach to the development of the ISP. This includes more detailed consideration of gas infrastructure, consumer energy resources (CER) and other demand-side factors in the ISP together with a range of enhancements around demand forecasts and accessibility. AEMO expects to continue to evolve the ISP to ensure it remains fit for purpose.
3. AEMO's view is that it is essential for the ISP to be a robust and enduring roadmap that stakeholders can rely on, as it is a crucial information source for investment decisions. To ensure the ISP is robust and in the interests of consumers, AEMO takes a scenario-based planning approach, supplemented by sensitivity testing, to mitigate the risks of over- and under-investment. Whilst this approach can provide insights on impacts as a result of changes in assumptions, AEMO recognises that its treatment of jurisdictional policies in the ISP does not provide the same risk mitigation compared with other key assumptions made in the ISP. This rule change provides an opportunity to consider matters to support confidence in the ISP, such as the role of the AEMC's target statement and how best to optimise scenarios and sensitivity analysis.

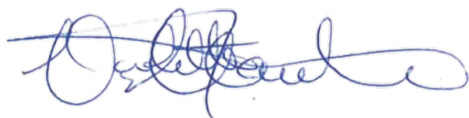
¹ Australian Energy Market Operator, *Information Toolkit: The Integrated System Plan*, p.16, at <https://www.aemo.com.au/-/media/files/major-publications/isp/2025/isp-toolkit.pdf>.

4. The ISP triggers the commencement of the regulatory process for major transmission projects and has the potential to inform other investment schemes going forward. Within this context, the ISP's impact on regulatory processes and on the timing of investments should be carefully considered when assessing changes to the ISP framework.

AEMO is committed to ensuring that the ISP remains a robust and enduring roadmap that stakeholders can rely on. This rule change provides an opportunity to explore and identify opportunities to enable and ensure confidence in the ISP as a credible roadmap to 2050, AEMO looks forward to working with the AEMC and stakeholders to achieve this goal.

We have provided further perspectives in Attachment 1 below. If you would like to discuss anything further, please contact Hannah Heath, AEMO Group Manager – Strategic Market Reform (hannah.heath@aemo.com.au).

Yours sincerely,



Violette Mouchaileh

Executive General Manager – Policy & Corporate Affairs

Attachment 1: AEMO Detailed Submission

1 Background to the ISP

The Integrated System Plan (ISP) has been an important component of Australia's energy sector planning since 2018 and the background to how and why the ISP came about can provide useful context.

In 2016, severe thunderstorms and tornadoes in South Australia resulted in a widespread blackout. This event prompted federal and state energy ministers to commission then Chief Scientist Dr Alan Finkel AO to conduct an *Independent Review into the Future Security of the National Electricity Market*, also known as the Finkel Review. This review aimed to address the issues that contributed to the South Australia blackout and ensure a more reliable, secure, and sustainable National Electricity Market (NEM).

During the review, the idea of an integrated plan emerged as a necessity to develop Renewable Energy Zones and guide the energy transition in the NEM, in acknowledgement of the complex and rapid transformation towards net zero emissions.

AEMO was tasked with leveraging its extensive stakeholder engagement and power system and modelling expertise to develop the ISP, with the first ISP published in 2018. The first ISP was widely regarded as transformational for power system planning, identifying Renewable Energy Zones to bring together generation, storage and transmission planning in the NEM for the first time.

2 The role and evolution of the ISP

The scope of the ISP continues to develop as the ISP framework evolves. The role of the ISP is underpinned by the National Electricity Law (NEL), the National Electricity Objective (NEO) and the need for the NEM to support Australia's transition to a net zero emissions economy by 2050. AEMO develops the ISP in line with the NEL, which requires AEMO "to prepare, maintain and publish a plan for the development of the national transmission grid... in accordance with the Rules"².

The ISP sets out the "mix of generation, storage and network investments required to meet both consumer needs and government energy and emissions targets between now and 2050"³. The purpose described above informs AEMO's treatment of jurisdictional policies within the ISP, including those listed in the AEMC targets statement.

Noting that the NEM is supporting Australia's transition to a net zero emissions economy by 2050, AEMO considers that the ISP can best support achievement of the NEO by continuing to promote timely and efficient investment that facilitates the transition.

As outlined in the Consultation Paper, the ISP is important to the energy sector and is leveraged to inform a wide range of processes including investment decisions⁴ and the commencement of regulatory processes for major transmission projects⁵. AEMO is committed to ensuring the ISP can continue to meet stakeholder needs and that its evolution can fulfil future roles, whilst accounting for practical constraints.

² *National Electricity (South Australia) Act 1996* Section 49(2)(a).

³ Australian Energy Market Operator, *Information Toolkit: The Integrated System Plan*, p.16, at <https://www.aemo.com.au/-/media/files/major-publications/isp/2025/isp-toolkit.pdf>.

⁴ For example, see p.1-2 of the Clean Energy Investor Group's submission to the 2025 Inputs, Assumptions and Scenarios Report, at <https://www.aemo.com.au/-/media/files/major-publications/isp/2025/stage-2-submissions/clean-energy-investor-group.pdf>.

⁵ National Electricity Rules, clause 5.16A.

To ensure the ISP remains fit-for-purpose, AEMO has implemented a range of changes in response to rule changes and regulatory reforms. For example, the 2024 ISP included Australia's greenhouse gas emissions as a formal class of market benefits⁶. The Draft 2026 ISP will build on prior improvements by incorporating recommendations from the Department of Climate Change, Energy, the Environment and Water (DCCEEW)'s Review of the ISP in 2024⁷, including for more detailed consideration of gas infrastructure, consumer energy resources (CER) and other demand-side factors in the ISP.

In addition to rule changes and regulatory reforms, AEMO also seeks to enhance each ISP based on stakeholder feedback through the consultation process. Over the period since the first ISP in 2018, AEMO has received more than 750 submissions from stakeholders and, in response to their feedback, made enhancements such as evolving the Transmission Cost Database and use of costs as a planning input, improving the scenario weighting process, having greater regard for gas infrastructure and electricity distribution networks, and improving engagement accessibility to ensure that AEMO hears from an increasingly broad and diverse group of stakeholders.

3 AEMO's current approach to considering and reporting on jurisdictional policies and system costs in the ISP

3.1 AEMO's treatment of jurisdictional policies

AEMO's treatment of jurisdictional policies in the ISP accounts for a range of future uncertainties and aligns with the requirements of the National Electricity Rules (NER)⁸ and the AER's *Cost Benefit Analysis Guidelines* (CBA Guidelines)⁹.

As set out in section 2, AEMO recognises that the ISP informs a range of investment and regulatory decisions and that it is therefore essential for the ISP to be a robust planning document that stakeholders can rely on. AEMO also acknowledges the risks associated with variability in future worlds, including the potential for both over- and under-investment in infrastructure. To mitigate these risks, AEMO develops the ISP so that it is resilient to future uncertainties.

The development of the ISP is a two-year process involving extensive consultation with industry, government, and consumer advocates. AEMO adopts a scenario-based planning approach to inform the most robust forward plan¹⁰, capturing key uncertainties facing the energy sector as it decarbonises. As there is inherent uncertainty around the specific impacts of an assumption under any given scenario, AEMO uses sensitivity analysis to complement scenario-based planning to test the impact of varying key input assumptions in scenarios¹¹. This ensures that a range of uncertainties are factored into the ISP development process.

Both scenario planning and sensitivity testing can help mitigate the risks of over-and under-investment. For example, the 2024 ISP included a *Constrained Supply Chains* sensitivity, which explored how supply chain limitations affecting the rate of investment in generation, storage and transmission infrastructure to transition the NEM, impacted the benefits identified in the Step Change scenario¹². This sensitivity acknowledged the potential for constrained supply chains to impact or delay the achievement of government policies and targets. Whilst this approach can provide insights on policy outcomes as a result of changes in assumptions, AEMO

⁶ In response to the *Harmonising the national electricity rules with the updated national energy objectives (electricity)* rule change (ERC0362).

⁷ Department of Climate Change, Energy, the Environment and Water, *Review of the Integrated System Plan – Final Report*, at <https://www.aph.gov.au/DocumentStore.ashx?id=5a846e04-13ff-4216-aa90-3bbe1a6a0f5d> (automatic download).

⁸ National Electricity Rules, clause 5.22.3(b).

⁹ Australian Energy Regulator, *Cost Benefit Analysis Guidelines*, pp.31-32, at <https://www.aer.gov.au/industry/registers/resources/guidelines/cost-benefit-analysis-guidelines>.

¹⁰ Australian Energy Market Operator, *2024 Integrated System Plan*, p.9, at <https://www.aemo.com.au/-/media/files/major-publications/isp/2024/2024-integrated-system-plan-isp.pdf>.

¹¹ Australian Energy Market Operator, *2025 Inputs, Assumptions and Scenarios Report*, p.23, at https://www.aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2024/2025-iasr-scenarios/final-docs/2025-inputs-assumptions-and-scenarios-report.pdf.

¹² Australian Energy Market Operator, *2024 ISP Appendix 6. Cost-Benefit Analysis*, p.112-114, at <https://www.aemo.com.au/-/media/files/major-publications/isp/2024/appendices/a6-cost-benefit-analysis.pdf>.

recognises the treatment of jurisdictional policies in the ISP (that is, assuming all policies are met in all scenarios) means the approach to scenario planning and sensitivity testing does not provide the same risk mitigation for policy outcomes compared with other key assumptions made in the ISP.

3.2 AEMO's approach to system costs and costing jurisdictional policies

AEMO values costs in the ISP using guidance from the CBA Guidelines. AEMO acknowledges the proponent's interest in "whole of system" cost assessments. While the ISP has evolved significantly since its inception in 2018, the ISP currently optimises investments at the transmission and utility-scale level and identifies actionable projects that TNSPs must assess in more detail. The 2026 ISP will incorporate enhancements which, among other things, include increased consideration of some kinds of distribution network investments, including to unlock CER and in select instances to support Renewable Energy Zones, however these identified investments do not compel action from distribution businesses. AEMO is of the view that existing categories of costs included in the Rules are appropriate and aligned with the purpose of the ISP.

AEMO also acknowledges the proponent's proposal for the ISP to assess the costs of jurisdictional policies, which it currently does not do. In practice, this proposal would be inappropriate to implement, as policies are economy-wide and AEMO only has visibility of costs and benefits within the energy sector. Decisions made by governments to set policy targets consider a broad range of factors that sit outside of the scope of the CBA Guidelines. Specifically, factors that may contribute to decision-making on these policies include environmental outcomes, economic growth, workforce planning, as well as broader regional development¹³. Any assessment made in the ISP would not be able to fully capture these factors given the existing classes of costs and benefits in the Guidelines, which align with the purpose of the ISP. Whilst the ISP could attempt to model the cost of policies, given the broader factors noted above, the ISP would not capture the full benefits, leading to an asymmetric assessment. In a similar vein, any attempt by AEMO to model a "baseline" scenario, as proposed by the proponent, would likely result in an asymmetric assessment of benefits and costs due to AEMO's visibility over electricity sector benefits and costs but lack of visibility over economy-wide impacts.

AEMO considers that the Productivity Commission's inquiry into cheaper, cleaner energy could be a more appropriate avenue for pursuing transparency on policy costs, as the interim report for this inquiry has recommended that Australian governments estimate the cost-effectiveness of emissions reduction policies by quantifying policy costs and then assessing them against an independently set benchmark¹⁴.

4 Acknowledging emerging challenges

AEMO recognises that stakeholder confidence in, and alignment with, the ISP is vital to the ISP's value as a strategic planning document. The ISP has a central role in supporting informed investment to enable the transition.

AEMO has evolved the way that it engages with stakeholders since 2018, having introduced mechanisms such as the ISP Consumer Panel, regular workshops and webinars, and the ISP Toolkit, alongside existing forums such as the Forecasting Reference Group. These forums and tools provide diverse stakeholder groups with opportunities to contribute to the development of each iteration of the ISP.

Feedback on ISP consultation processes has highlighted ongoing concerns regarding the lack of variability of future worlds in the ISP. AEMO has also heard that stakeholders are interested in the ISP reflecting the realities of technology readiness, supply chain feasibility, and social licence. AEMO recognises these challenges, and as set out in section 3 above, uses scenario-based planning supplemented by sensitivity testing to mitigate the inherent challenges associated with forecasting over a long-term horizon. Whilst AEMO

¹³ For example, see factors mentioned in *Climate Change (Net Zero Future) Bill 2023 – Second Reading Speech*, at <https://www.parliament.nsw.gov.au/Hansard/Pages/HansardResult.aspx#docid/HANSARD-1820781676-93659/HANSARD-1820781676-93659>.

¹⁴ Productivity Commission, *Investing in cheaper, cleaner energy and the net zero transformation – Interim report*, p.29-38, at https://assets.pc.gov.au/2025-09/interim%20report.pdf?VersionId=f2Byjt5bclXF_bRL.3.7RvIwpWAhm8h1.

considers that its treatment of policies and system costs aligns with the requirements set out in the NER and CBA Guidelines, AEMO is considering how best to enhance the robustness of the ISP to promote confidence in its outputs. This includes consideration of the role of sensitivities and the design of scenario parameters.

5 The assessment framework and approach

AEMO supports the AEMC's proposed approach and assessment framework for considering this rule change proposal. In its assessment, it will be important for the AEMC to identify the benefits and risks associated with changes to policy settings to consumers and the energy system more broadly, and consider how to reflect these benefits and risks in the ISP in a way that continues to promote timely and efficient investment in infrastructure to meet the NEO. For example, this could be through developing assessment criteria focusing on the deliverability of policy targets, and then testing targets against these criteria to ensure the ISP considers stakeholders' views on achievable future worlds.

In considering any changes to the ISP framework, AEMO encourages the AEMC to recognise that the ISP has a role in triggering the RIT-T for major transmission projects and could potentially inform other investment mechanisms. Any changes that could impact or delay the timely delivery of infrastructure to such an extent the current government policy could not be met without costly interventions should be carefully considered.

AEMO considers that any changes to the ISP framework should support the purpose of the ISP and achievement of the NEO. Processes that significantly increase the complexity of preparing the ISP or the identification of an ODP, without delivering commensurate benefits, should be avoided.