

RULE E

Consultation paper

National Electricity Amendment (Clarifying the treatment of jurisdictional policies and system costs in the ISP) Rule 2025

Proponent

Centre for Independent Studies

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Reference: ERC0406

About the AEMC

The AEMC reports to the energy ministers. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the energy ministers.

Acknowledgement of Country

The AEMC acknowledges and shows respect for the traditional custodians of the many different lands across Australia on which we all live and work. We pay respect to all Elders past and present and the continuing connection of Aboriginal and Torres Strait Islander peoples to Country. The AEMC office is located on the land traditionally owned by the Gadigal people of the Eora nation.

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Summary

- The energy sector is transitioning to a net zero emissions system. This strategic direction is set by Commonwealth, state and territory governments and is supported by a range of jurisdictional targets and policies. The Commonwealth Government has set an overarching target for the Australian economy to reach net zero emissions by 2050, with the decarbonisation of the electricity sector widely recognised as key to achieving this target.
- The Integrated System Plan (ISP) plays a role in achieving this objective by identifying the optimal development pathway for the electricity sector that meets these targets and policies. It identifies the electricity infrastructure investment that is required over at least a 20-year time horizon that best supports the long-term interests of consumers, as defined by the National Electricity Objective (NEO).
- The NEO sets out the objective of the National Electricity Law (NEL) and National Electricity Rules (NER) framework, including the relevant considerations when considering the long-term interests of consumers. In 2023, the NEO was updated to include the achievement of targets set by participating jurisdictions that are for (or are likely to contribute to) reducing Australia's greenhouse gas emissions. This means the 'long term interests of consumers' includes consideration of emissions reduction. The Australian Energy Market Operator (AEMO) must have regard to the NEO when carrying out its transmission planning functions under the NEL and NER, including preparing the ISP.
- The ISP is produced every two years by AEMO and consists of an extensive modelling exercise, drawing on a vast array of forecasts and studies developed or commissioned by AEMO that are subject to stakeholder consultation. Because of its comprehensive nature, the ISP now plays a central role in the energy sector, informing planning and investment decisions for major transmission projects as well as being used across a range of other processes. For example, the inputs and assumptions used in the ISP the Inputs, Assumptions and Scenarios Report (IASR) process as well as some of the outputs from the ISP are used in:
 - transmission investment decisions under the regulatory investment test for transmission (RIT-T)
 - other AEMO planning and forecasting processes such as the Electricity Statement of Opportunities (ESOO) and Gas Statement of Opportunities (GSOO)
 - jurisdictional plans and programs such as the NSW Infrastructure Investment Objectives Report and the Commonwealth Government's Capacity Investment Scheme.
- Given the broad influence and multiple uses of the ISP, it is essential it is fit for purpose for the sector going forward, and that its purpose is clear. A fit for purpose ISP will be crucial to addressing a number of challenges and opportunities for the sector identified in the AEMC's strategic vision. These include enabling coordination of energy policy and other policy areas through the identification of long-term planning interactions and maintaining energy system security and reliability over time and in the long-term interests of consumers.
- The AEMC is initiating a rule change process to assess a request submitted by the Centre for Independent Studies (the proponent) alongside a broader review of the ISP framework. The rule change request proposes changes to the way jurisdictions' emissions reduction targets and policies are incorporated into the ISP, the categories of costs that are considered in the analysis, and the information that is published regarding costs.
- 7 This consultation paper is the first stage of our rule change process and seeks your feedback on:

- the problems raised in the rule change request
- the proposed solutions
- how we propose to assess the request to determine if it will promote the long-term interests of consumers.

We are initiating the rule change in parallel with a broader review of the ISP framework

- In this period of rapid transmission growth, there are many factors that can delay transmission investment or lead to higher costs, including supply chain constraints, available workforce capacity, delays due to land use planning and social licence, and lack of investor appetite. Rapid increases in the cost of transmission projects have also been experienced in recent years. The ISP takes into account many of these factors, but it remains challenging in this context to develop a plan that is deliverable and sufficiently consistent across updates to guide long-term investment.
- The AEMC is initiating this rule change process alongside a broader review of the ISP framework. The AEMC is required to review the ISP framework by 1 July 2027 under clause 11.126.10 of the NER. Given this requirement and the inter-related nature of the rule change request submitted by the proponent, the Commission intends to undertake a review of the ISP framework in parallel with this rule change process.
- The Commission considers that this approach will enable us to consider issues holistically, and identify and explore relationships between issues. It will also enable issues raised through consultation to be progressed through the most appropriate process. This could include enabling issues raised in response to this consultation paper that are not directly related to the rule change request to be considered through the ISP review.
- All aspects of the ISP framework established under rules 5.16A, 5.22, and 5.23 of the NER will be in scope for the ISP review. The terms of reference for the ISP review have been published alongside this consultation paper and are available on our website.

We are seeking your views on the issues identified and solutions proposed by the proponent

- The proponent's rule change request suggests amendments to a number of aspects of the ISP that it considers would better contribute to meeting the NEO. The issues raised by the proponent are:
 - Treatment of jurisdictional policies: The proponent suggests the ISP does not adequately account for uncertainty as to when jurisdictions' emissions reduction and renewable energy targets will be met or whether they may change in the future. Under AEMO's current approach, all ISP scenarios meet all jurisdictional policies on the targets statement at the intended date set by governments.¹, AEMO does not assess the probability that any individual target will or will not be achieved by the intended date. The proponent suggests that this creates a risk of over-investment in transmission infrastructure.
 - To address this issue, the proponent proposes AEMO should be required to model a
 'baseline' scenario with no jurisdictional policy constraints as well as being required to
 consider plausible future policy changes by jurisdictions.

¹ The targets statement sets out the targets by participating jurisdictions that are for (or are likely to contribute to) reducing Australia's greenhouse gas emissions. See Section 1.1.1 for further detail.

- Whole of system costs: The proponent considers that the ISP analysis should include a
 broader range of costs in determining 'whole of system' costs and identifying the optimal
 development path. The proponent suggests that the current approach does not adequately
 consider all costs that consumers pay.
 - To address this issue, the proponent proposes AEMO should be required to include an
 assessment of 'whole of system' costs including those relating to consumer energy
 resources (CER), distribution network upgrades, recycling and disposal of renewables and
 payments to coal generators for life extensions.
- Publication of information: The proponent is seeking additional information to be published
 relating to system costs and the cost implications of individual jurisdictional policies, as part
 of the ISP. The proponent considers that the current approach does not provide sufficient
 information for consumers to assess the implications of government policies.
 - To address this issue, the proponent proposes AEMO be required to publish the cost impact of each individual jurisdictional policy as part of the ISP.
- The proponent also suggests transitional arrangements requiring an addendum to the 2024 ISP to be published including the cost information outlined above and for the rules to apply for the 2026 ISP.
- We are seeking your view(s) on the materiality of the issues raised by the proponent, as well as the proposed solutions and alternatives.

We are seeking your views on our proposed assessment criteria

- 15 Considering the NEO and the issues raised in the rule change request, the Commission proposes to assess the rule change request against the following five assessment criteria:
 - **Emissions reductions** The rule change will consider how changes to the ISP may impact the achievement of jurisdictions' emissions reduction targets.
 - Principles of market efficiency Concepts of efficiency and risk allocation are expected to be key considerations. The rule change request raises questions around risk and uncertainty, and who is best placed to manage risk. The efficiency of transmission planning and investment decisions over a long-term timeframe are also relevant.
 - Innovation and flexibility The ISP's resilience to future uncertainty and change (especially
 with regard to government policy) will be a key consideration. This rule change could influence
 the flexibility of future ISPs, however the benefits of flexibility may need to be weighed against
 the benefits of stability for long-term infrastructure planning.
 - Implementation considerations Implementation timing, cost and complexity will be key considerations. The impact of the changes proposed by the proponent on the ISP development cycle, including the implications for the development of the 2028 ISP, are likely to be relevant. The implementation complexity and costs will also be considered.
 - Principles of good regulatory practice Regulatory principles such as stability and
 predictability as well as consistency with broader direction of reform are expected to be
 relevant in the context of the issues raised by the proponent.

Submissions are due by 6 November 2025 with other engagement opportunities to follow

- There are multiple options to provide your feedback throughout the rule change process.
- 17 Written submissions responding to this consultation paper must be lodged with Commission by 6

November 2025 via the Commission's website, https://www.aemc.gov.au/contact-us/lodge-submission. The project code is ERC0406.

We also intend to seek feedback through public forums, industry briefing sessions and one-on-one discussions. Please reach out via the contact form on the project webpage.

Full list of consultation questions

Question 1: What are your views on AEMO's current approach to incorporating jurisdictional targets and policies into the ISP and its alignment with the NEO?

Question 2: Do you consider that the current approach increases the risk of overinvestment or early investment in transmission?

- 1) Do you consider that this risk is material? What evidence supports this view?
- 2) Do you consider the requirements set out in clause 5.22.10(a)(5)(ii) of the NER which requires AEMO to consider the risks to consumers arising from uncertainty, including over investment, under-investment, premature or overdue investment are sufficient to address this issue?
- 3) What are your views on the corresponding risks of under-investment or overdue investment, for example if targets are added or strengthened over time, or there are delays to transmission build? What evidence supports this view?

Question 3: Do you consider that the categories of costs included/excluded in the ISP analysis are appropriate? If so, how material is this?

Question 4: Is the range of cost information published as part of the ISP sufficient, or do you consider it too limited? If you consider it is too limited, then how material is this problem?

Question 5: What are your views on the role the ISP should play in the development of the energy sector and the way it can best support achievement of the NEO?

Question 6: What are your views on the proposed solution to include a 'baseline' scenario and plausible changes in government policy in the ISP?

- 1) Do you consider that the proponent's proposed solution addresses the identified problem?
- 2) Do you have views on how 'plausible changes in future government policy' could be assessed or defined?

- 3) What are your views on the alternative solutions noted above in section 3.1.1? Are there other solutions the Commission should consider?
- 4) What do you think are the key considerations that the Commission should take into account when assessing potential solutions?
- 5) What is AEMO's role, if any, in assessing the deliverability or likelihood of emissions reduction targets being met on time as intended? What impact could a change in AEMO's role have?

Question 7: Should additional cost categories be included in the ISP?

- 1) Do you consider the proponent's proposed solution to expand the categories of costs considered in the ISP addresses the identified problem?
- 2) Do you consider that there are any costs that should be added to the ISP analysis? If yes, what are these costs, why should they be added, and what is the materiality?
- 3) If additional categories of costs are included, are there any related benefits that would not be captured and should be included? For example, distribution network upgrades would increase costs but could also have corresponding benefits such as increased CER export capacity and potential emissions reduction.

Question 8: Should AEMO publish additional information on policy costs as part of the ISP?

- 1) What are your views on the proponent's proposed solution?
- 2) Are there alternative solutions that would be more appropriate or effective?

Question 9: What are the key costs and benefits of the proposal and alternatives?

- 1) Do you agree with the costs and benefits identified by the proponent?
- 2) Are there other relevant costs and benefits that should be considered?
- 3) Are stakeholders able to provide quantification or other supporting evidence as to the scale of the various costs and benefits of the options under consideration?

Question 10: What are the key implementation considerations?

Are there additional implementation considerations, not noted above, that the Commission should consider in its decision making?

Question 11: Assessment framework

Do you agree with the proposed assessment criteria? Are there additional criteria that the Commission should consider or criteria included here that are not relevant?

How to make a submission

We encourage you to make a submission

Stakeholders can help shape the solutions by participating in the rule change process. Engaging with stakeholders helps us understand the potential impacts of our decisions and, in so doing, contributes to well-informed, high quality rule changes.

We have included questions in each chapter to guide feedback, and the full list of questions is above. However, you are welcome to provide feedback on any additional matters that may assist the Commission in making its decision.

How to make a written submission

Due date: Written submissions responding to this consultation paper must be lodged with Commission by **6 November 2025**.

How to make a submission: Go to the Commission's website, <u>www.aemc.gov.au</u>, find the "lodge a submission" function under the "Contact Us" tab, and select the project reference code **ERC0406**.²

Tips for making submissions are available on our website.3

Publication: The Commission publishes submissions on its website. However, we will not publish parts of a submission that we agree are confidential, or that we consider inappropriate (for example offensive, defamatory, vexatious or irrelevant content, or content that is likely to infringe intellectual property rights).⁴

Other opportunities for engagement

There are other opportunities for you to engage with us, such as one-on-one discussions or industry briefing sessions.

For more information, you can contact us

Please contact us with questions or feedback at any stage, noting the project code.

Email: submissions@aemc.gov.au

Telephone: 02 8296 7800

If you are not able to lodge a submission online, please contact us and we will provide instructions for alternative methods to lodge the submission.

³ See: https://www.aemc.gov.au/our-work/changing-energy-rules-unique-process/making-rule-change-request/submission-tips

⁴ Further information is available here: https://www.aemc.gov.au/contact-us/lodge-submission

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1 The context for this rule change request

This consultation paper seeks stakeholder feedback on the rule change request submitted by the Centre for Independent Studies (the proponent), which seeks to change the way the Integrated System Plan (ISP) considers jurisdictional policies, expand the types of costs that are considered in the ISP, and increase the amount of cost-related information that AEMO publishes as part of the ISP.

This consultation paper should be read together with the rule change request, which can be found on our <u>website</u>.

1.1 The ISP plays a central role in the energy sector as it transitions to net zero

The ISP is established under the National Electricity Rules (NER) with the purpose of setting out a whole of system plan for the efficient development of the power system over at least a 20-year time horizon.⁵ It aims to meet power system needs to contribute to achieving the National Electricity Objective (NEO).⁶

Developing the ISP involves AEMO conducting an extensive modelling exercise, drawing on a comprehensive process to determine inputs and assumptions, which are subject to stakeholder consultation. Because of its comprehensive nature, the ISP now plays a foundational role in the energy sector, informing planning and investment decisions across a range of processes and stakeholder groups.

"[The ISP] exerts considerable influence across multiple aspects of the electricity supply chain, in addition to its ongoing function as an electricity transmission plan"

- Energy and climate change ministerial council, 2024⁷

A wide range of stakeholder groups recognise this central role of the ISP (see Appendix A).

1.1.1 The ISP supports the achievement of emissions reduction targets under the NEO

The ISP plays an important role in setting out the long-term development plan for the electricity system that meets emissions reduction targets that are part of the NEO. The NEO sets out the relevant considerations when assessing the long-term interests of electricity consumers, and the regulatory framework has been established to promote these objectives.⁸

In 2023, the NEO was updated to include the achievement of targets set by participating jurisdictions that are for (or are likely to contribute to) reducing Australia's greenhouse gas emissions, along with the existing limbs of the NEO. ⁹ The long-term interests of consumers has included emissions reduction since this update.

⁵ Clause 5.22.2 of the NER.

⁶ Clause 5.22.2 of the NER.

⁷ Energy and climate change ministerial council 2024, Review of the Integrated System Plan, Final Report, p. 16.

⁸ The regulatory framework for electricity is established with the objective of promoting the long-term interests of consumers, as defined by the NEO. See Section 7 of the National Electricity Law.

⁹ The NEO was updated to include consideration of emissions reduction on 21 September 2023 via the Statutes Amendment (National Energy Laws) (Emissions Reduction Objectives) Act 2023.

The NEO is set out in section 7 of the National Electricity Law and is as follows:

The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to—

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system; and
- (c) the achievement of targets set by a participating jurisdiction—
 - (i) for reducing Australia's greenhouse gas emissions; or
 - (ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

At the same time that the NEO was updated, the NEL was amended to require the AEMC to maintain a targets statement setting out the targets set by participating jurisdictions that are for (or are likely to contribute to) reducing Australia's greenhouse gas emissions. ¹⁰ Under section 32A(5) of the NEL, a person or body must consider, as a minimum, the targets stated in the targets statement when having regard to the NEO.

AEMO must have regard to the NEO when carrying out its transmission planning functions under the NEL and NER, including preparing the ISP.¹¹

The change to the NEO means that AEMO is now required to consider jurisdictional emissions policies alongside other components of the NEO, including price, quality, safety, reliability and security. In practice, this means that the ISP identifies the development path that optimises benefits to consumers while meeting the emissions reduction targets covered by the NEO.¹²

1.1.2 The ISP has a formal role in the transmission planning and investment process

The ISP plays an important role in the planning and investment process for transmission projects in the NEM.

The ISP acts as the first formal step in the economic assessment process for 'actionable' ISP projects. ¹³ The input assumptions and modelling outputs for the ISP also define a number of parameters used in the Regulatory Investment Test for Transmission (RIT-T), to create alignment between the ISP and subsequent cost benefit analysis under the RIT-T. ¹⁴

The inputs and assumptions developed for the ISP, as set out in the *Inputs, Assumptions and Scenarios Report* (IASR) and associated documents, are also used in other regulatory and planning processes such as:

- RIT-T processes for transmission projects that are <u>not</u> actionable ISP projects. ¹⁵
- Long-term electricity supply adequacy forecasting under the Electricity Statement of Opportunities (ESOO).¹⁶

¹⁰ The targets statement is required under section 32A(1) of the NEL. Available here: https://www.aemc.gov.au/regulation/targets-statement-emissions.

¹¹ NEL section 49(3).

¹² AEMO, ISP methodology, June 2025, p. 6.

¹³ Actionable projects are those that are on the 'optimal development path' (ODP) and require work to start imminently. Under rule 5.16A of the NER, there is no requirement for a project specification consultation report (PSCR), the first step in the RIT-T, to be undertaken for actionable ISP projects.

¹⁴ For example, when undertaking steps in the RIT-T for actionable ISP projects, transmission network service providers (TNSPs) must adopt: the identified need set out in the ISP; the most recent ISP parameters (unless they can demonstrate why variation is necessary); and the market modelling from the ISP (as far as practicable). Source: NER clause 5.15A.3(b)(7) and AER, Regulatory Investment Test for Transmission Instrument, 2024, sections 2(b), 2(d) and 2(f).

¹⁵ AER, Regulatory Investment Test for Transmission Instrument, 2024, section 3(a).

¹⁶ AEMO, <u>Forecasting Approach - Electricity Demand Forecasting Methodology</u>, August 2023.

 Long-term gas supply adequacy forecasting under the Gas Statement of Opportunities (GSOO).¹⁷

1.1.3 The ISP has broad influence across the energy sector

The ISP has also become an important reference point for the energy sector as the investment roadmap to meet emissions reduction and renewable energy targets.

Jurisdictions, in particular, use the ISP as an evidence base to support investment in electricity infrastructure. ¹⁸ For example, the Commonwealth Government's Capacity Investment Scheme is designed to support the entry of 6GW of dispatchable capacity into the NEM by 2030, which is based on modelling from the 2024 ISP Step Change scenario. ¹⁹

Other jurisdictional planning processes also align with the ISP and the IASR assumptions. For example, the NSW *Infrastructure Investment Objectives Report* largely aligns with the IASR.²⁰

1.2 The approach to the ISP has evolved over time

The ISP was established following a recommendation from the *Independent review into the future* security of the National Electricity Market (the Finkel Review). It identified the need for an integrated plan for the NEM transmission network, primarily to connect renewable energy zones in a coordinated way.²¹

The ISP was first published in 2018 and its methodology and approach have evolved over time. For example, the most recent 2024 ISP, relative to the 2018 ISP, had eight additional supporting documents and considered additional factors such as social licence, benefits of CER coordination and the impact of constrained supply chains.

In addition to ongoing adjustments and improvements made by AEMO, the ISP has been considered through a number of reviews and reform processes since its inception. These include:

- The AEMC's Transmission Planning and Investment Review (TPIR) (2021-23) ²² considered the
 role the ISP should play in the transmission economic assessment process. The TPIR Stage 3
 final report identified a preferred option for further investigation that would bring all benefits
 modelling that currently happens in the RIT-T forward to occur in the ISP.
- In February 2024, the AEMC made a rule change that required AEMO to consider all jurisdictional policies on the targets statement when preparing the ISP, to align with new section 32A(5) of the National Electricity Law.²³
- The Energy and Climate Ministerial Council (ECMC) undertook a Review of the Integrated System Plan (2023-24)²⁴ which made 15 recommendations regarding the scope, function and purpose of the ISP. The resulting reforms included increased reflection of demand-side participation and clarification with regard to treatment of jurisdictional policies.
- Three of the ECMC review recommendations relating to improved consideration of demandside factors, gas and incorporation of community sentiment in the ISP were implemented

¹⁷ AEMO, Gas Demand Forecasting Methodology Information Paper, March 2025.

¹⁸ ECMC, Review of the Integrated System Plan - Final Report, January 2024, page 6.

¹⁹ Department of Climate Change, Energy, the Environment and Water, <u>Capacity Investment Scheme, Public Consultation Paper</u>, August 2023, p. 4.

²⁰ AEMO Services, 2023 Infrastructure Investment Objectives Report, December 2023, p. 69.

²¹ Dr Alan Finkel et al., Independent review in the future security of the National Electricity Market, June 2017, p. 124.

²² AEMC, Transmission planning and investment review, Stage 3 final report, May 2023.

²³ See clause 5.22.3(b) of the NER, introduced in the *National Electricity Amendment (Harmonising the national energy rules with the updated national energy objectives) Rule 2024*. The AEMC is required to maintain a targets statement under section 32A of the NEL stating the targets set by participating jurisdictions that are for the purpose of (or are likely to contribute to) reducing Australia's greenhouse gas emissions.

²⁴ ECMC, Review of the Integrated System Plan - Final Report, January 2024.

through AEMC rule change processes.²⁵ These changes will enable more accurate consideration of cost-effective tradeoffs between transmission-connected and distribution-connected generation assets in the 2026 ISP.²⁶

 The Australian Senate established the Select Committee on Energy Planning and Regulation in Australia (2024) to inquire into and report on the institutional structures, governance, regulation, functions and operation of the Australian energy market. The Select Committee's final report made various recommendations with regard to the ISP, as well as other energy planning and regulation matters more broadly.²⁷

1.3 We are undertaking a package of reform to ensure the ISP remains fit for purpose

In this period of rapid transmission growth, there are many factors that can delay transmission investment or lead to higher costs.

Key challenges to the delivery of electricity infrastructure are well documented, including in the 2024 ISP itself. These include barriers such as supply chain constraints, available workforce capacity, delays due to land use planning and social licence, and lack of investor appetite. Rapid increases in the cost of transmission projects are also a challenge for long-term infrastructure planning. For example, transmission cost estimates that will be used for the 2026 ISP are around 25-55 per cent higher, and in some cases up to 100 per cent higher, than equivalent estimates made two years earlier. The ISP takes into account many of these factors, but it remains challenging in this context to develop a plan that is deliverable and sufficiently consistent across updates to guide long-term investment.

A further challenge is the time taken to complete the end-to-end economic assessment process for transmission investment (which includes the ISP and RIT-T process). The need to improve the timeliness of this process, while retaining appropriate rigour and consultation, was broadly recognised by stakeholders during the AEMC's *Transmission Planning and Investment Review*.³⁰

1.3.1 We are initiating this rule change in parallel with a broader review of the ISP framework

Within this context, the AEMC is initiating this rule change process alongside a broader review of the ISP framework.

The AEMC is required to review the ISP framework by 1 July 2027 under clause 11.126.10 of the NER. Given this requirement and the inter-related nature of the rule change request submitted by the proponent, the Commission intends to commence a review of the ISP framework before the end of 2025, to run in parallel with this rule change process.

The Commission considers that this approach will enable us to consider issues holistically, and to identify and explore the relationships between issues. It will also enable issues raised through consultation to be progressed through the most appropriate process. This could include

²⁵ AEMC, <u>Better integration of gas and community sentiment into the ISP</u>, 19 December 2024 and AEMC, <u>Improving consideration of demand-side factors in the ISP</u>, 19 December 2024.

²⁶ AEMO has begun implementing these changes through the preparatory documents for the ISP, such as the 2025 Electricity Network Options Report and the Gas Infrastructure Options Report: AEMO, <u>Draft 2025 Electricity Network Options Report</u>, 22 May 2025 and AEMO, <u>Draft 2025 Draft Gas Infrastructure Options Report</u>, 22 May 2025.

²⁷ Parliament of Australia, Final Report - Select Committee on Energy Planning and Regulation in Australia, Australia Government, 2024.

²⁸ AEMO, 2024 Integrated System Plan, June 2024, p. 79.

²⁹ AEMO, 2025 Electricity network options report, July 2025, p. 5, 31.

³⁰ AEMC, Transmission planning and investment review, Stage 3 - Final report, May 2023, p. 13.

progressing through the ISP review any issues identified in submissions to this rule change that do not relate to issues raised in the rule change request.

All aspects of the ISP framework established under rules 5.16A, 5.22, and 5.23 of the NER will be in scope for the ISP review. The terms of reference for the ISP review have been published alongside this consultation paper and are available on our website.

1.4 The proponent proposes changes to the way jurisdictional policies and costs are treated in the ISP

The proponent submitted a rule change request on 31 October 2024, which proposes a number of changes to the way the ISP incorporates jurisdictional policies and costs, as well as the type of information that is published as part of the ISP. The key issues and solutions proposed by the proponent are summarised as follows (discussed further in Chapters 2 and 3):

- Treatment of jurisdictional policies: The proponent suggests the ISP does not adequately account for uncertainty as to when emissions reduction and renewable energy targets will be met or whether they may change in the future.³¹ Under AEMO's current approach, all ISP scenarios meet all included policies at the intended date set by governments, and AEMO does not assess the probability that any individual policy will or will not be achieved by the intended date.³² The proponent suggests that this creates a risk of over-investment in transmission infrastructure.³³
 - To address this issue, the proponent proposes AEMO should be required to model a 'baseline' scenario with no jurisdictional policy constraints as well as being required to consider plausible future policy changes by jurisdictions.³⁴
- Whole of system costs: The proponent suggests the ISP analysis should include a broader range of costs in determining 'whole of system' costs and identifying the optimal development path. The proponent suggests that the current approach does not adequately consider all costs that consumers pay.³⁵
 - To address this issue, the proponent proposes AEMO should be required to include an
 assessment of 'whole of system' costs, such as those relating to consumer energy
 resources (CER), distribution network upgrades, recycling and disposal of renewables and
 payments to coal generators for life extensions.³⁶
- Publication of information: The proponent suggests additional information should be
 published as part of the ISP relating to the jurisdictional policies. The proponent considers that
 the current approach does not provide sufficient information for consumers or policymakers to
 assess the cost implications of each jurisdictional policy.³⁷
 - To address this issue, the proponent proposes AEMO be required to publish the cost impact of each individual jurisdictional policy as part of the ISP.³⁸

³¹ Rule change request, p. 1.

³² AEMO, 2025 Inputs, Assumptions and Scenarios Report, July 2025, p. 29.

³³ Rule change request, p. 1.

³⁴ Rule change request, p. 3.

³⁵ Rule change request, p. 1.

³⁶ Rule change request, p. 2,3.

³⁷ Rule change request, p. 2.

³⁸ Rule change request, p. 3.

The proponent also suggests transitional arrangements requiring an addendum to the 2024 ISP to be published outlining the cost information proposed above and for the rules to apply for the 2026 ISP. 39

The rule change request can be found on the AEMC project page here.

1.5 We have initiated the rule change process

1.5.1 We will undertake this rule change request using the standard rule change process

This paper is the first stage of our consultation process. We will undertake this rule change request using the standard rule change process.

This standard rule change request includes the following formal stages:

- a proponent submits a rule change request
- the Commission commences the rule change process by publishing a consultation paper and seeking stakeholder feedback
- stakeholders lodge submissions on the consultation paper and engage through other channels to make their views known to the AEMC project team
- the Commission publishes a draft determination and draft rule (if relevant)
- stakeholders lodge submissions on the draft determination and engage through other channels to make their views known to the AEMC project team
- the Commission publishes a final determination and final rule (if relevant).

The proposed milestones for this rule change process are shown below in Figure 1.1.

Figure 1.1: Indicative rule change timeline



Source: Source: AEMC

Information on how to lodge your submission and other opportunities for engagement is set out on page vi of this document.

You can find more information on the rule change process on our website. 40

³⁹ Rule change request, p. 4.

⁴⁰ See our website: https://www.aemc.gov.au/our-work/changing-energy-rules

2 The issues raised in the rule change request

This chapter outlines the issues raised by the proponent in the rule change request. For the purpose of this consultation process, we have separated the issues raised by the proponent as follows:

- 1. Treatment of jurisdictional targets and policies (Section 2.1)
- 2. Whole of system costs (Section 2.2)
- 3. Publication of information (Section 2.3).

Section 2.4 seeks stakeholder views on the role of the ISP, which the Commission considers important when assessing the issues raised by the proponent.

2.1 The proponent suggests the ISP does not adequately consider uncertainty around jurisdictional policies

The proponent suggests that the current approach to including jurisdictions' emissions reduction policies in the ISP does not adequately account for uncertainty and therefore may not maximise long-term consumer outcomes. Specifically, the proponent suggests that the current approach does not "properly account for the very plausible future in which these targets are missed, reduced or removed altogether by a jurisdiction".⁴¹

The rule change request notes that clause 5.22.3(b) of the NER only requires AEMO to consider the emissions reduction policies stated on the targets statement when developing the ISP, but that in practice "AEMO has effectively interpreted 'consider' to mean every target on the targets statement must be included in every scenario in the 2024 ISP".⁴²

At present, all scenarios considered in the ISP are consistent with all jurisdictional policies included in the targets statement.⁴³ In practice, this means that all development paths assume that all included jurisdictional policies are met on time as intended (see Box 1 for further detail on current arrangements).

AEMO's rationale for the current approach is set out in the IASR, which emphasises the importance of consistent treatment of jurisdictional policies, given that all scenarios form part of the cost benefit analysis. 44 AEMO notes that inefficient outcomes are likely to occur if power system planning does not adequately consider committed government policy. 45 The IASR also highlights that AEMO has the potential to explore the robustness of the ISP outputs through sensitivity analysis, including in the event that jurisdictional policies cannot be achieved in their targeted timeframes due to uncertainties in key assumptions. 46 The IASR notes that a constrained supply chains sensitivity could be used to identify the impact on broader development needs if circumstances preclude the ability to achieve jurisdictional policies on time. AEMO undertook this type of sensitivity analysis in the 2024 ISP. 47

⁴¹ Rule change request, p. 1.

⁴² Rule change request, p. 1.

⁴³ See section 1.1.1 for further information about the targets statement.

⁴⁴ AEMO, 2025 Inputs, Assumptions and Scenarios Report, July 2025, p. 28.

⁴⁵ AEMO, 2025 Inputs, Assumptions and Scenarios Report, July 2025, p.28.

⁴⁶ AEMO, 2025 Inputs, Assumptions and Scenarios Report, July 2025, p. 29.

⁴⁷ AEMO, 2024 Integrated System Plan, Final Report, p. 75.

Participating jurisdictions also have the ability to include a target in, or remove a target from, the targets statement under the NEL.⁴⁸ Changes to the targets statement impact the policies that are included or excluded from the ISP. As the ISP is prepared every two years, AEMO is able to reflect such changes in the ISP within a relatively short period.

Box 1: The ISP currently assumes jurisdictions' emissions reduction policies are achieved as intended in all scenarios

Clause 5.22.3(b) of the NER sets out that AEMO, in preparing the ISP:

- 1. must consider the emissions reduction targets stated in the targets statement, and
- 2. may consider a current environmental or energy policy of a participating jurisdiction, including an emissions reduction target that is not set out in the targets statement, where that policy has been sufficiently developed to enable AEMO to identify the impacts of it on the power system and at least one of the following is satisfied:
 - a commitment has been made in an international agreement to implement the policy
 - the policy has been enacted in legislation
 - there is a regulatory obligation in relation to the policy
 - there is material funding allocated to the policy in a budget of a participating jurisdiction, or
 - Energy Ministers have advised AEMO to incorporate the policy.

The targets statement includes all targets set by participating jurisdictions for the purpose of (or that are likely to contribute to) reducing Australia's greenhouse gas emissions.

Policies which are either in the targets statement or AEMO considers meet the criteria at point 2 above are included in the ISP ('included policies').

AEMO requires all ISP scenarios ('Slower Growth', 'Step Change' and 'Accelerated Transition' in the 2025 IASR) to be consistent with all included policies. This means that all development paths considered in the ISP assume that all included policies will be met at the intended date set by jurisdictions.

The incorporation of jurisdictional policies also influences the inputs and assumptions for forecasting consumers' energy consumption and demand patterns and AEMO's energy forecasts more broadly. These inputs and assumptions are also used in other processes such as the ESOO and GSOO and therefore impact those processes as well.

AEMO does not assess the probability that any individual policy will or will not be achieved by the intended date.

Source: Clause 5.22.3(b) of the NER; AEMO, 2025 Inputs, Assumptions and Scenarios Report, July 2025, p.29.

Question 1: What are your views on AEMO's current approach to incorporating jurisdictional targets and policies into the ISP and its alignment with the NEO?

⁴⁸ Under section 32A(2) of the NEL, a Minister can direct the AEMC to include a target in, or remove it from, the targets statement.

2.1.1 The proponent suggests the current approach increases the risk of over-investment in transmission

The proponent suggests that the current approach to incorporating jurisdictional policies in the ISP is not consistent with clause 5.22.10(a)(5)(ii) which requires AEMO, when preparing the ISP, to consider "the risks to consumers arising from uncertainty, including over-investment, underinvestment, premature or overdue investment."

The proponent considers the current approach to jurisdictional policies increases the "risk of over-investment in transmission, arising from uncertainty in policies of participating jurisdictions." ⁵⁰ The proponent states that "this lack of consideration of plausible future policy changes does not serve the long term interests of consumers, who are, as a result, at a greater risk of facing increased costs from over-investment." ⁵¹

The proponent also considers that "the emissions reduction component of the NEO must be balanced with the NEO component of serving the long-term interests of consumers with respect to price" and that "at present, the binding constraints being placed on every scenario are giving too much weight to the emissions reduction objective and failing to transparently account for price impacts on consumers".⁵²

Question 2: Do you consider that the current approach increases the risk of overinvestment or early investment in transmission?

- 1) Do you consider that this risk is material? What evidence supports this view?
- 2) Do you consider the requirements set out in clause 5.22.10(a)(5)(ii) of the NER which requires AEMO to consider the risks to consumers arising from uncertainty, including over investment, under-investment, premature or overdue investment are sufficient to address this issue?
- 3) What are your views on the corresponding risks of under-investment or overdue investment, for example if targets are added or strengthened over time, or there are delays to transmission build? What evidence supports this view?

2.2 The proponent considers that a broader range of costs should be considered in the ISP

The second issue outlined by the proponent relates to the categories of costs considered in the ISP. The proponent suggests that the current approach does not consider 'whole of system' costs and that a broader range of cost categories should be included, stating it is "crucial that the whole of system costs are explicitly stated in the ISP". 53

The proponent provides the following examples of 'whole of system' costs that should be included in the ISP:⁵⁴

- consumer energy resources (eg rooftop solar PV installed within the distribution network)
- distribution network upgrades
- recycling and disposal of renewables

⁴⁹ Rule change request, p. 1.

⁵⁰ Rule change request, p. 1.

⁵¹ Rule change request, p. 1.

⁵² Rule change request, p. 1.

⁵³ Rule change request, p. 2.

Rule change request, p. 2.

payments to coal generators for life extensions.

The categories of costs that AEMO must quantify in the ISP are set out in clause 5.22.10(d) of the NER, with further guidance on how these costs should be defined set out in the AER's *Cost benefit analysis guidelines*. ⁵⁵ Broadly, costs that are currently included in the ISP relate to the construction, operation and maintenance and compliance of projects on the development path, as well as other costs deemed relevant by AEMO and/or the AER (see Box 2 for further detail).

The Commission notes that AEMO is currently working to include a broader range of cost considerations in the 2026 ISP, including greater consideration of distribution augmentation costs to facilitate forecast CER exports as well as gas infrastructure constraints. These changes are being incorporated following the AEMC's *Improving consideration of demand-side factors in the ISP* and *Better integration of gas and community sentiment in the ISP* rule changes.

Box 2: Costs considered in the ISP relate to projects on the development path

The costs that must be considered in the ISP are defined in clause 5.22.10(d) of the NER and are as follows:

- · costs incurred in constructing or providing the projects in the development path
- operating and maintenance costs in respect of the projects in the development path
- the cost of complying with laws, regulations and applicable administrative requirements in relation to the construction and operation of projects in the development path, and
- any other class of costs that are:
 - determined to be relevant by AEMO and agreed to by the AER in writing before the publication of the draft ISP, or
 - specified as a class of cost in the AER's Cost benefit analysis guidelines.

Further guidance as to how these cost categories should be treated and quantified are provided in the AER's Cost benefit analysis guidelines.

In the 2024 ISP, AEMO did not consider the following costs in its assessment of development paths:

- Distribution costs. AEMO's rationale was that distribution system planning, including cost assessments, happens at the state and local level rather than centrally as with transmission planning.
- Costs of consumer energy resources, such as rooftop solar, home batteries and electric vehicles. AEMO's rationale was that CER is a private purchase by households and businesses.
- · The costs implications of individual government policies, as proposed by the proponent.

Source: Clause 5.22.10 of the NER; AER Cost benefit analysis guidelines, November 2024, pp. 19-22; AEMO 2024, ISP factsheet, p. 2.

Question 3: Do you consider that the categories of costs included/excluded in the ISP analysis are appropriate? If so, how material is this?

2.3 The proponent suggests the ISP should provide additional information on the costs of individual jurisdictional policies

The third issue raised by the proponent relates to the information the ISP publishes on individual jurisdictional policies. The proponent considers that the current approach does not provide sufficient information for consumers to assess the cost implications of each jurisdictional policy. The proponent suggests "it is in the long-term interests of consumers to know the costs of applying binding jurisdictional policies to the system" and that "without this transparency, it is very difficult for consumers to know their long-term interests are being served by AEMO and jurisdictions". ⁵⁶

At present, AEMO publishes cost and benefit information related to each development path, consistent with the guidance in the AER's *Cost benefit analysis guidelines* (see Box 3 for further details). The primary purpose of this information is to enable comparison between prospective development paths and to identify the optimal development path (ODP) that maximises consumer benefits.

Box 3: System cost information published in the ISP is for the purpose of identifying the ODP

AEMO considers a range of system costs when ranking different development paths and identifying the ODP. The pathway needed to ensure the NEM's reliability and security needs, that is aligned with Australia's emissions reduction targets and other policies, with the lowest long-run cost to consumers is known as the ODP. The ODP is the development path that provides the highest weighted net market benefits, subject to AEMO's assessment of the distribution of risk and further sensitivity analysis around key assumptions.¹

The costs and benefits considered in the ISP are for the purposes of ranking development paths and identifying the ODP.² AEMO may also exclude certain benefit categories from its analysis if:³

- a particular class of market benefit is likely not to materially affect the outcome of the assessment of the development path
- the estimated cost of undertaking the analysis to quantify the market benefit is likely to be disproportionate given the level of uncertainty regarding future outcomes.

Under the AER's guidelines, AEMO is also required to exclude costs which cannot be measured as accruing to generators, distribution network service providers, transmission network service providers and consumers of electricity.⁴

AEMO must publish in the draft and final ISP its identification of the ODP based on quantitative assessment of the costs and benefits of various development paths.⁵

Source: Source: ¹ AER, Cost benefit analysis guidelines, p. 32; ² Clause 5.22.6(a)(4) of the NER; ³ Clause 5.22.10(c)(3) of the NER; ⁴ AER Cost benefit analysis guidelines, p. 20; ⁵ Clause 5.22.6(a)(4) of the NER.

Question 4: Is the range of cost information published as part of the ISP sufficient, or do you consider it too limited? If you consider it is too limited, then how material is this problem?

2.4 The issues raised must be considered with reference to the role of the ISP

The Commission considers the role of the ISP, including how it contributes to meeting the NEO, is a key consideration when assessing the issues raised by the proponent. It is essential to be clear on the role of the ISP, and AEMO's role in developing the ISP, when determining how to assess the issues raised in the rule change request.

We are interested in stakeholder views on the role of the ISP, including what that should be going forward.

The stated purpose of the ISP under clause 5.22.2 of the NER is:

...to establish a whole of system plan for the efficient development of the power system that achieves power system needs for a planning horizon of at least 20 years to contribute to achieving the national electricity objective.

The purpose of the ISP as set out in the NER was updated in 2024 to include explicit reference to achieving the NEO, to align with the inclusion of emissions reduction considerations in the NEO.⁵⁷ This was in recognition that the benefits of emissions reduction may extend beyond those incurred directly by consumers of electricity in the NEM.⁵⁸

Under AEMO's current approach, the ISP is an electricity infrastructure plan that optimises benefits for consumers and meets jurisdictional targets. ⁵⁹ The Commission considers that achieving jurisdictional targets through efficient investment is aligned with the NEO. However, given the evolving role of the ISP, the best way for the ISP to support achievement of the NEO going forward may warrant further consideration.

In addition, as noted in section 1.1, the ISP and its associated documents also influence other processes both within and outside the NER framework. The requirement for both the inputs and assumptions under the IASR and ISP outputs to be consistent with jurisdictional policies, has a bearing on these processes, beyond the long-term planning function of the ISP.

The Commission considers that establishing clarity around the role of the ISP as well as its appropriate use in informing other processes will support the decision-making process under this rule change. Such clarity will also support decision-making under other forthcoming, related work programs including the AEMC's Review of the ISP, which will be undertaken alongside this rule change.

Question 5: What are your views on the role the ISP should play in the development of the energy sector and the way it can best support achievement of the NEO?

⁵⁷ This change replaced reference to the long-term interests of electricity consumers with a reference to achieving the NEO. See new clause 5.22.2 of the National Electricity Amendment (Harmonising the national energy rules with the updated national energy objectives) Rule 2024.

⁵⁸ AEMC, Harmonising the national energy rules with the updated national energy objectives, final determination, February 2024, pp. 21-22.

⁵⁹ AEMO, ISP Methodology, June 2025, p. 7.

3 The proponent suggests changes to how policies and system costs are considered in the ISP

This chapter seeks feedback on:

- · the solutions proposed in the rule change request and potential alternative solutions, and
- the costs and benefits of the proposed solutions and other implementation matters the Commission may need to consider in making its determination.

3.1 The proponent suggests AEMO should model scenarios where no policies are achieved and with alternative government policies

The proponent suggests that the current treatment of government policies in the ISP does not adequately account for uncertainty as to when emissions reduction or renewable energy targets will be met or whether they might change.⁶⁰ It suggests that the ISP should include:⁶¹

- · a 'baseline' scenario which does not assume that any jurisdictional targets are achieved, and
- additional scenarios representing plausible changes in future government policy, including where targets are missed or change.

The proponent proposes the NER be amended so that AEMO is required to include the additional scenarios noted above when identifying the optimal development path.⁶²

The proponent also proposes the NER be amended so that the AER's *Cost benefit analysis guidelines* require AEMO to include in the ISP the proposed additional scenarios when testing the robustness of alternative development paths to future uncertainties.⁶³

The proponent suggests that these changes would better account for uncertainty around jurisdictional policies in the ISP which would reduce the risk of over-investment in transmission and so better support the long-term interests of consumers.

The Commission expects that relevant considerations in assessing this proposal will include:

- The potential cost to consumers of premature or over-investment in transmission, including the potential loss in option value if investments were to be made earlier than required.
- The potential costs and risks associated with overdue or under-investment in transmission, including risks to reliability of supply, delays in connection for new generation, the requirement to extend the operating life of existing generation, and higher emissions. The potential for these risks to be asymmetrically larger, as has been noted elsewhere, will be considered.⁶⁴
- The ability to make transparent and replicable decisions as to the treatment of individual government policies in the ISP.
- Alignment with requirements set out in the NEL, such as the requirement to consider all targets on the targets statement when having regard to the NEO.⁶⁵

⁶⁰ Rule change request, p. 1.

⁶¹ Rule change request, p. 3.

⁶² See page 8 of the Rule change request for the proposed change to clause 5.22.6(a)(4) of the NER.

⁶³ See page 8 of the Rule change request for the proposed change to clause 5.22.5(d)(2) of the NER.

⁶⁴ See for example, AEMC, Transmission planning and investment review, Stage 3 draft, September 2022, pp. 9-10.

⁶⁵ Section 32A(5) of the NEL.

3.1.1 We will consider alternative solutions as part of this process

There may be alternative solutions to address the issues raised in the rule change request. Alternative approaches to addressing the issues raised by the proponent that the Commission may consider as part of this process could include:

- Greater use of sensitivity analysis: AEMO already has the ability to test the implications of changes in assumptions through sensitivity analysis. 66 AEMO could make greater use of this function to test the impact on optimal timing of transmission investment if it becomes apparent that jurisdictional policies are likely to change, or to be met later than intended. This could be supported by greater guidance as to when or how this sensitivity analysis should be undertaken.
- Consider timing of targets in some or all scenarios: AEMO could assess the expected delivery
 date of individual jurisdictional policies. This expected date (rather than the intended date)
 could be factored into some or all ISP scenarios. There would be practical challenges to
 making such an assessment, and the appropriateness of AEMO determining when individual
 policies or targets are likely to be met would require further consideration.
- Establish different approaches for different categories of policies in the ISP: There could be criteria established for AEMO to determine which approach to use when including each relevant target in the ISP. The criteria to apply the current approach (target is met in all scenarios) could include minimum requirements that would support achievement of the target, such as a requirement for a proportional budget commitment or regulatory obligation. This would be similar to the approach that applied prior to the introduction of emissions into the NEO. If a particular target did not meet these criteria, AEMO could reflect it in the ISP using an alternative approach, eg involving sensitivity testing. Consideration would need to be given as to how this aligns with the requirements set out in the NEL.⁶⁷

Question 6: What are your views on the proposed solution to include a 'baseline' scenario and plausible changes in government policy in the ISP?

- 1) Do you consider that the proponent's proposed solution addresses the identified problem?
- 2) Do you have views on how 'plausible changes in future government policy' could be assessed or defined?
- 3) What are your views on the alternative solutions noted above in section 3.1.1? Are there other solutions the Commission should consider?
- 4) What do you think are the key considerations that the Commission should take into account when assessing potential solutions?
- 5) What is AEMO's role, if any, in assessing the deliverability or likelihood of emissions reduction targets being met on time as intended? What impact could a change in AEMO's role have?

⁶⁶ AEMO, 2025 Inputs, Assumptions and Scenarios Report, July 2025, p. 29.

⁶⁷ Under section 32(A)(5) of the NEL, a person or body must consider, as a minimum, the targets stated in the targets statement when having regard to the NEO.

3.2 The proponent suggests expanding the categories of costs to support identification of the optimal development path

The proponent suggests AEMO should take into account a broader range of costs in the ISP, including "currently excluded but significant costs". 68 It considers this would support assessment of whether "AEMO has successfully promoted efficient investment in electricity services, particularly with respect to the price of supply of electricity". 69

The rule change request identifies specific cost categories that the proponent considers would improve the accuracy of cost consideration between development paths and should be included in the ISP. These proposed costs are:⁷⁰

- consumer energy resources (eg rooftop solar PV installed within the distribution network)
- distribution network upgrades
- recycling and disposal of renewables
- payments to coal generators for life extensions.

The proponent proposes amending the NER so that the ISP is required to include an assessment of these 'whole of system' costs faced by electricity consumers.⁷¹

The proponent also proposes amending the NER so that the *Cost benefit analysis guidelines* require AEMO to include in the ISP an assessment of whole of system costs faced by consumers.⁷²

In assessing the suitability of these or other cost categories, the Commission expects relevant considerations to include:

- the extent to which cost categories are already (or could be) incorporated within existing cost categories. This includes changes to enable greater consideration of demand side factors that are being implemented in the 2026 ISP.⁷³
- the impact on the time and cost of the ISP development process
- the extent to which these cost categories are likely to influence the selection of the optimum development path. For example, costs that do not vary between development paths are unlikely to influence the ranking of preferred options.
- the extent to which the cost categories are a relevant consideration within the bounds of the NEO framework.

Question 7: Should additional cost categories be included in the ISP?

- 1) Do you consider the proponent's proposed solution to expand the categories of costs considered in the ISP addresses the identified problem?
- 2) Do you consider that there are any costs that should be added to the ISP analysis? If yes, what are these costs, why should they be added, and what is the materiality?
- 3) If additional categories of costs are included, are there any related benefits that would not be

⁶⁸ Rule change request, p. 2.

⁶⁹ Rule change request, pp. 1-2.

⁷⁰ Rule change request, p. 2.

⁷¹ See page 8 of the Rule change request for the proposed change to clause 5.22.6(a)(8) of the NER.

⁷² See page 8 of the Rule change request for the proposed change to clause 5.22.5(d)(7) of the NER.

⁷³ See AEMO, 2025 Electricity Network Options Report, July 2025 and the AEMC's recent rule Improving the consideration of demand-side factors in the ISP. December 2024...

captured and should be included? For example, distribution network upgrades would increase costs but could also have corresponding benefits such as increased CER export capacity and potential emissions reduction.

3.3 The proponent suggests AEMO should publish additional information on the impact of each jurisdictional policy

The proponent suggests changes should be made to the NER to require additional cost-related information to be published as part of the ISP. Specifically, the proponent proposes that AEMO should publish the effect of each individual jurisdictional policy on the whole of system cost as part of the ISP. ⁷⁴ Jurisdictional policies are those on the targets statement as well as those that may be captured under clause 5.22.3(b)(2).

Under this proposal the NER would be amended to require AEMO to include the impact on whole of system costs for each target or policy of each participating jurisdiction included in any scenario. The AER's Cost benefit analysis guidelines would require AEMO to include this cost-related information for each jurisdictional policy in the ISP.

The rule change request suggests that the changes be made in time for the 2026 ISP and that an addendum to the 2024 ISP should be published within three months of this information being developed.⁷⁷

The Commission expects relevant considerations in assessing this proposal to include:

- the feasibility and timing implications of the additional analysis proposed, given the ISP currently takes around two years to complete
- the extent to which AEMO has, or should have, a role in setting and informing economy-wide policy decisions by jurisdictions
- the extent to which the benefits suggested by the proponent are a relevant consideration within the bounds of the NEO framework
- the extent to which this issue is (or will be) addressed outside the NEL/NER framework.

The Commission notes that other government reform processes are also considering these issues. For example, the Productivity Commission has proposed that a reporting process be established by the Commonwealth Government on the cost-effectiveness of emissions reduction policies. Additionally, the Commonwealth Government's recently announced 2035 emissions reduction target was supported by modelling and analysis of the economic impact of different policy approaches, demonstrating that governments factor this type of analysis into their decision making.

Question 8: Should AEMO publish additional information on policy costs as part of the ISP?

1) What are your views on the proponent's proposed solution?

⁷⁴ Rule change request, p. 2.

⁷⁵ See page 8 of the Rule change request for the proposed change to clause 5.22.6(a)(9) of the NER.

⁷⁶ See page 8 of the Rule change request for the proposed change to clause 5.22.5(d)(8) of the NER.

⁷⁷ Rule change request, p. 4.

⁷⁸ Productivity Commission, Investing in cheaper, cleaner energy and the net zero transformation, Interim Report, August 2025, p. 29.

2) Are there alternative solutions that would be more appropriate or effective?

3.4 What are the costs and benefits of the proposed solutions?

3.4.1 Benefits: the proposal could increase the range of possible future scenarios considered and provide additional information

The proponent notes in the rule change request that the proposed changes could have the following benefits:⁷⁹

- Decision makers: Improved understanding of how jurisdictional policies affect whole of system costs.
- Market participants: Enable market participants to identify good investment opportunities and increase competition.
- Consumers: Greater transparency around costs would improve decision-making around jurisdictional policies and private investment, resulting in lower whole of system costs overall, which will drive down prices faced by consumers. More confidence in the robustness of the ISP.
- AEMO: More clarity around the role of the ISP and its role in driving down costs for consumers.

3.4.2 Costs: the proposal would increase the cost and complexity of the ISP process, and may reduce clarity

The proponent notes that the proposed changes are likely to mean AEMO would incur additional costs in preparing the ISP, particularly in the form of additional modelling capability and possibly data collection. AEMO's running costs are ultimately recovered from consumers.

In addition to these costs, the Commission notes there are also potentially drawbacks to the usefulness of the ISP as a long-term planning document from considering a larger number of highly divergent scenarios, as suggested by the proponent. Selecting a development path from a wide spectrum of possible scenarios - ranging from no policies through to alternative government policies - could reduce the usefulness of the scenario planning process.

The proposed changes might also increase the risk of significant change to the development path between ISPs, which has the potential to impact long-term infrastructure planning. Some change between biennial ISPs is unavoidable given the pace of change in the sector, and the two-yearly cycle provides a useful opportunity to reflect any updated targets. However, including a wide range of variants on the outcomes of government targets in each ISP's primary scenarios could be disruptive and result in less consistent and predictable optimal development paths.

Question 9: What are the key costs and benefits of the proposal and alternatives?

- 1) Do you agree with the costs and benefits identified by the proponent?
- 2) Are there other relevant costs and benefits that should be considered?
- 3) Are stakeholders able to provide quantification or other supporting evidence as to the scale of the various costs and benefits of the options under consideration?

3.5 What are the implementation considerations?

The ISP currently takes around two years to complete due to the vast array of inputs and assumptions that are developed as well as significant stakeholder consultation. A key implementation consideration for this rule change will therefore be how the changes impact the resource requirements and timing of this development process.

The Commission will also consider how any potential changes fit within the two -year development cycle, noting that inputs and assumptions for the 2026 ISP have largely been finalised. The Commission will consider the need for transitional arrangements, including to account for the time it may take to make subsequent updates to the AER's *Cost benefit analysis guidelines* or other instruments (if required).

Question 10: What are the key implementation considerations?

Are there additional implementation considerations, not noted above, that the Commission should consider in its decision making?

4 Making our decision

When considering a rule change proposal, the Commission considers a range of factors.

This chapter outlines:

- · issues the Commission must take into account
- the proposed assessment framework
- decisions the Commission can make
- · rule-making for the Northern Territory.

We would like your feedback on the proposed assessment framework.

4.1 The Commission must act in the long-term interests of consumers

The Commission is bound by the National Electricity Law (NEL) to only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national electricity objective.⁸⁰

The NEO is:81

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to—

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system; and
- (c) the achievement of targets set by a participating jurisdiction—
 - (i) for reducing Australia's greenhouse gas emissions; or
 - (ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

The targets statement, available on the <u>AEMC website</u>, lists the emissions reduction targets to be considered, as a minimum, in having regard to the NEO.⁸²

4.2 We must also take an additional factor into account

Under the NEL, there are additional considerations for some NER rule changes. The rule change request may trigger one of these additional considerations.

If the proposed rule would have effect with respect to an adoptive jurisdiction (ie, Victoria), under section 91(8) of the NEL the Commission may only make a rule if it is satisfied that the proposed rule is compatible with the proper performance of AEMO's declared network functions in that jurisdiction.

The Commission will explore the potential impacts of the rule change request on this additional consideration as part of this rule change project.

⁸⁰ Section 88 of the NEL.

⁸¹ Section 7 of the NEL.

⁸² Section 32A(5) of the NEL.

4.3 We propose to assess the rule change using these four criteria

4.3.1 Our methods to analyse the proposed rule

Considering the National Electricity Objective and the issues raised in the rule change request, the Commission proposes to assess this rule change request against the set of criteria outlined below. These assessment criteria reflect the key potential impacts – costs and benefits – of the rule change request. We consider these impacts within the framework of the National Electricity Objective.

The Commission's regulatory impact analysis may use qualitative and/or quantitative methodologies. The depth of analysis will be commensurate with the potential impacts of the proposed rule change. We may refine these methodologies as this rule change progresses, including in response to stakeholder submissions.

Consistent with good regulatory practice, we also assess other viable policy options - including not making the proposed rule (a business-as-usual scenario) and making a more preferable rule - using the same set of assessment criteria and impact analysis methodology where feasible.

4.3.2 Assessment criteria and rationale

The proposed assessment criteria and rationale for each is as follows:

- **Emissions reductions** The rule change will consider how changes to the ISP may impact the achievement of jurisdictions' emissions reduction policies.
- Principles of market efficiency Concepts of efficiency and risk allocation are expected to be key considerations. The rule change request raises questions around risk and uncertainty, and who is best placed to manage risk. The efficiency of transmission planning and investment decisions over a long-term timeframe are also relevant.
- Innovation and flexibility The ISP's resilience to uncertainty and adaptability to external changes (especially with regard to government policy) will be a key consideration. This rule change could influence the flexibility of future ISPs, however the benefits of flexibility may need to be weighed against the benefits of stability for long-term infrastructure planning.
- Implementation considerations Implementation timing, cost and complexity will be key considerations. The impact of the changes proposed by the proponent on the ISP development cycle, including the implications for the development of the 2028 ISP, are likely to be relevant. The implementation complexity and costs will also be considered.
- Principles of good regulatory practice Regulatory principles such as stability and
 predictability as well as consistency with broader direction of reform are expected to be
 relevant in the context of the issues raised by the proponent.

Question 11: Assessment framework

Do you agree with the proposed assessment criteria? Are there additional criteria that the Commission should consider or criteria included here that are not relevant?

4.4 We have three options when making our decision

After using the assessment framework to consider the rule change request, the Commission may decide:

not to make a rule

- to make the rule as proposed by the proponent,⁸³ or
- to make a rule that is different to the proposed rule (a more preferable rule), as discussed below

The Commission may make a more preferable rule (which may be materially different to the proposed rule) if it is satisfied that, having regard to the issue or issues raised in the rule change request, the more preferable rule is likely to better contribute to the achievement of the NEO.⁸⁴

4.5 The proposed rule would not apply in the Northern Territory

Parts of the NER apply in the Northern Territory, subject to modifications set out in regulations made under the Northern Territory legislation adopting the NEL.85

The proposed rule would not apply in the Northern Territory, as it amends provisions in NER chapter 5 that have no effect in the Northern Territory. 86 Consequently, the Commission will not assess the proposed rule against additional elements required by the Northern Territory legislation.

 $^{83 \}quad \text{The proponent describes the proposed rule changes in section 3 of the rule change request} \\$

⁸⁴ Section 91A of the NEI

⁸⁵ National Electricity (Northern Territory) (National Uniform Legislation) Act 2015. The regulations under this Act are the National Electricity (Northern Territory) (National Uniform Legislation) (Modification) Regulations 2016 (NT Regulations).

Under regulation 5A of the NT Regulations, rule 5.22 on the ISP has no effect in the Northern Territory. The version of the NER that applies in the Northern Territory is available on the AEMC website at: https://energy-rules.aemc.gov.au/ntner.

A Stakeholder public statements on the role of the ISP

Table A.1: Stakeholder public statements on the role of the ISP

Stakeholder	Statement
Australian Energy Council (Source: Submissions to the Inquiry by the Select Committee on Energy Planning and Regulation in Australia)	The ISP is a key document for market participants and Governments to cost-effectively manage the energy transition for the benefit of consumers.
AER (Source: Submissions to the Inquiry by the Select Committee on Energy Planning and Regulation in Australia)	The introduction of the ISP was intended to streamline transmission planning and approvals, replacing the first stage of the RIT-T (Project Specification Consultation Report) for actionable projects. The ISP now identifies these projects, which are defined under the NER as those which are required to meet an identified need as part of the optimal development path for the national electricity market.
Ausgrid (Source: Submission to the consultation paper, Improving consideration of demand-side factors in the ISP)	The ISP provides critical information to all energy sector participants about how we can deliver the energy transition quickly, at the lowest cost and at reduced impact to consumers.
Clean Energy Investor Group (Source: Submission to the consultation paper, Improving consideration of demand-side factors in the ISP)	The release of the Australian Energy Market Operator's (AEMO) 2024 Integrated System Plan (ISP) is a significant milestone for Australia's renewable energy investors. It offers a comprehensive roadmap that strengthens investor confidence and highlights the transformative potential of clean energy investments.
Energy Efficiency Council (Source: Submission to the consultation paper, Improving consideration of demand-side factors in the ISP)	The ISP is an influential document that guides decision-making by energy-sector investors and policymakers.
Energy Networks Australia (Source: Submissions to the Inquiry by the Select Committee on Energy Planning and Regulation in Australia)	The ISP plays a key role in designing the lowest cost, secure and reliable energy system for the National Energy Market.
Institute for Energy Economics and Financial Analysis (Source: Submissions to the Inquiry by the Select Committee on Energy Planning and Regulation in Australia)	The significance of the Integrated System Plan (ISP) has grown through recent iterations, as it encompasses the most robust modelling of pathways for the NEM that are compatible with federal and state policies.

Stakeholder	Statement
Justice and Equity Centre (Source: Submissions to the Inquiry by the Select Committee on Energy Planning and Regulation in Australia)	The ISP is (or should be) a coordinating mechanism and a central reference to optimise the transition from a systemic perspective.
Nexa Advisory (Source: Submissions to the Inquiry by the Select Committee on Energy Planning and Regulation in Australia)	The Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP) provides a roadmap which outlines the critical role that market and policy settings have in supporting investment certainty and delivering the transmission and renewable generation projects which deliver the lowest long-run cost to consumers.
Snowy Hydro (Source: Submission to the consultation paper, Improving consideration of demand-side factors in the ISP)	Currently, the ISP offers a comprehensive roadmap that strengthens investor confidence and highlights the potential of energy investments.
Transgrid (Source: Submission to the consultation paper, Improving consideration of demand-side factors in the ISP)	Transgrid considers that there is significant value in the trusted, comprehensive and detailed nature of AEMO's ISP.

Abbreviations and defined terms

AEMC Australian Energy Market Commission
AEMO Australian Energy Market Operator

AER Australian Energy Regulator

Commission See AEMC

ECMC Energy and Climate Change Ministerial Council

ES00 Electricity statement of opportunities

GS00 Gas statement of opportunities

NEL National Electricity Law
NEM National Electricity Market
NEO National Electricity Objective
NER National Electricity Rules
NERL National Energy Retail Law
NERO National Energy Retail Objective
NERR National Energy Retail Rules

NGL National Gas Law

NGO National Gas Objective
NGR National Gas Rules

Proponent The proponent of the rule change request
TPIR Transmission planning and investment review