

Rule Change Request

Making the ISP robust to policy change and clear on costs

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1. Request to make a rule

Aidan Morrison
Director of the Energy Program
Centre for Independent Studies
Level 1, 131 Macquarie St
Sydney 2000

2. Statement of issue

The Australian Energy Market Operator (AEMO) is required to prepare the Integrated System Plan (ISP) in accordance with rule 5.22 of the National Electricity Rules (NER). The legislated purpose of the ISP, as provided by NER clause 5.22.2, 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 for the **long-term interests of consumers of electricity**.

Under NER 5.22.3 (b), AEMO “must consider the emissions reduction targets stated in the targets statement” and “may consider a current environmental or energy policy of a participating jurisdiction” not set out in the targets statement, with some caveats. In practice, AEMO has effectively interpreted “consider” to mean every target in the targets statement must be included in every scenario in the 2024 ISP. This means there is no scenario considered by the ISP in which the jurisdictional policy representing the most binding constraint (i.e., the federal government target of 82% renewables by 2030) has not been placed on the model. The emissions reduction component in the National Electricity Objective (NEO) must be balanced with the NEO component of serving the long-term interests of consumers with respect to price. 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.

As part of the ISP requirements under NER 5.22.10 (a)(5)(ii), AEMO must consider “the risks to consumers arising from uncertainty, including over investment, under-investment, premature or overdue investment.” At present, the ISP is not adequately accounting for these risks, particularly the risk of over-investment in transmission, arising from uncertainty in policies of participating jurisdictions. By binding the ISP model in every scenario to constraints such as 82% renewables by 2030, AEMO has failed to properly account for the very plausible future in which these targets are missed, reduced or removed altogether by a jurisdiction. 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.

Furthermore, it is in the long term interests of consumers to know the costs of applying binding jurisdictional policies to the system, as well as whole of system cost of the electricity system. Without this transparency, it is more difficult to determine whether AEMO has successfully

promoted efficient investment in electricity services, particularly with respect to the price of supply of electricity, as required by the NEO. Including a baseline scenario without binding jurisdictional policies is therefore crucial for providing accurate information to consumers on the cost of the currently proposed path for the energy transition. It is likewise crucial that the whole of system costs are explicitly stated in the ISP and that the total takes into account currently excluded but significant costs such as consumer energy resources (CER), distribution network upgrades, recycling and disposal of renewables and payments to coal generators for life extensions.

The 2024 ISP Consumer Panel raised these issues as concerns in their report on the 2024 ISP Consumer Panel. On page 7, they stated, “While AEMO may claim that the ISP ‘...considers the whole NEM power system’ (p.35) we do not agree.” They further state that the lack of consideration of non-network options and the role of the distribution system must be remedied in the 2026 ISP to “reduce the risk of stranded transmission assets as technological development reduces the cost of these alternatives.” It is clear that the 2024 ISP as it currently stands is not a truly whole of system plan, which creates a risk for consumers who may end up paying for transmission assets that were not optimal for the system.

The Consumer Panel goes on to identify the problem with AEMO’s approach to government policies under the current Rules:

“We would suggest that the more governments (National and Jurisdictions) realise the difficulties of achieving their 2030 objectives, the greater the policy intervention and the less consumers are able to transparently see that the ISP is indeed an optimal development path from a consumer perspective with particular respect to the NEO.”

On page 8, they identified consumers’ key questions around continued expansion of jurisdictional policies as being “which policies compete, the rate of change of policy settings and whether they add costs.” This emphasises the importance of the ISP protecting the interests of consumers by quantifying the costs of policies and being robust to potential change in policies. It is crucial that whole of system costs, including those arising from policy constraints, are transparent for consumers so they can have faith in the optimal development path serving their long term interests.

One example of a current policy for which the Consumer Panel expressed scepticism of its benefits for consumers is Victoria’s offshore wind policy:

“We contend that offshore wind is only in the ODP because of that policy. It occurs nowhere else, despite all of the action at Federal and NSW Government levels, simply because it is too expensive – there are lower cost alternatives. But the nature of ISP modelling means that Victorian consumers will never know if it is cheaper to import solar and wind from South Australia or NSW than building offshore wind in Victoria. It is no different in other States policies which seek to maximise state benefits rather than NEM benefits.”

This reinforces the need for greater transparency, not just of whole of system costs, but also the costs of individual policies. Without this transparency, it is very difficult for consumers to know their long-term interests are being served by AEMO and jurisdictions.

Additionally, governments need to know the impacts of their policies on whole of system costs, as government budgets will be increasingly impacted by the energy transition. As the Consumer

Panel states on page 9, “Consumers will not be able to ‘afford’ to pay all of the costs associated with the ODP...” This means governments will have to shift costs onto taxpayers:

“...given the question of ‘who pays’ is outside of AEMO’s remit, we believe the ISP cannot make any conclusion about consumer affordability... This presents AEMO with a dilemma – its remit means it cannot make any conclusion about affordability. It can only make a conclusion about highest net benefits which is not affordability. However, the need to convince consumers that the transition is ‘affordable’ is key to getting ‘consumer social licence’ to support for the ISP. This means consumer support for the ODP is dependent on the level of Government financial support to ensure consumer affordability.”

As it currently stands, governments have no way of knowing whether their policies are optimal for achieving emissions reduction objectives while delivering the lowest cost, reliable system for consumers.

This rule change request seeks to clarify the role of the ISP as a whole of system plan serving the long-term interest of consumers by:

- requiring AEMO to model and publish a ‘baseline scenario’ with no jurisdictional policy constraints,
- requiring AEMO to model and publish scenarios considering plausible future policy changes,
- requiring AEMO to model and publish the effect of policies on system costs, and
- requiring AEMO to model and publish whole of system costs for the ISP.

3. Description of the proposed rule change

This rule change request seeks to amend the NER to clarify the role of the ISP as a whole of system plan serving the long-term interest of consumers by:

- Amending clause 5.22.5(d)(2) to clarify that the Cost Benefit Analysis (CBA) Guidelines must require AEMO, in testing the robustness of alternative development paths to future uncertainties, to include scenarios representing plausible changes in jurisdictional policies as well as a baseline scenario unconstrained by emissions reduction targets or energy and environmental jurisdictional policies.
- Inserting a new subclause in the NER to clarify the CBA Guidelines must require AEMO to include an assessment of whole of system costs as faced by consumers.
- Inserting a new subclause in the NER to clarify the CBA Guidelines must require AEMO to include the impacts on whole of system costs of each energy and environmental jurisdictional policy.
- Amending clause 5.22.6(a) to clarify that the ISP must, in identifying the optimal development path, include scenarios representing plausible changes in jurisdictional policies as well as a baseline scenario unconstrained by emissions reduction targets or energy and environmental jurisdictional policies.
- Inserting a new subclause in the NER to clarify the ISP must include an assessment of whole of system costs as faced by consumers.
- Inserting a new subclause in the NER to clarify the ISP must include the impacts on whole of system costs of each energy and environmental jurisdictional policy considered by the ISP.

- Inserting transitional arrangements in the NER requiring an addendum to be published for the 2024 ISP so that the new rules are able to not only improve the inputs, assumptions, scenarios and modelling for the 2026 ISP but also have the immediate effect of improving transparency for the 2024 ISP post-publication.

4. How the proposed rule change will address the issue

These rule changes will help clarify AEMO's role in ensuring efficient investment in the energy system and serving the long term interest of consumers through greater transparency on whole of system costs which will greatly impact prices faced by consumers. They will also ensure the ISP adequately takes into account plausible changes in policy and is robust against policy developments that result in targets being missed, reduced or removed.

Specifically, the rule changes will have the effects listed below.

4.1 Amendment to clause 5.22.5(d)(2) and 5.22.6(a)

These amendments will ensure the ISP, and particularly the ODP, is robust not only to future uncertainties in economic conditions and demand forecasts but also to future uncertainties relating to policy change. They will clarify the role of AEMO in finding the least cost development path that protects consumers against not only underinvestment but also overinvestment should government targets be missed, reduced or removed. The inclusion of a baseline scenario without binding policy constraints will allow AEMO to more accurately communicate to consumers the costs of policies and the proposed optimal development path. The requirement for the CBA Guidelines to address this will ensure the AER provides appropriate guidance to AEMO on how to incorporate these changes into scenario design and selection.

4.2 Insertion of new subclauses on inclusion of whole of system costs

These subclauses will ensure the ISP includes an assessment of whole of system costs that consumers will ultimately face, with the AER to provide broad guidance in the CBA Guidelines on how these total costs should be calculated (i.e., what costs currently excluded by AEMO should be included in the whole of system costs). This assessment will provide greater transparency to consumers, particularly by accounting for the costs of consumer energy resources and distribution network upgrades, which consumers must pay for directly.

4.3 Insertion of new subclauses on cost impacts of policies

These subclauses will ensure the ISP states the cost to the model of each policy constraint from each jurisdiction, with the AER providing broad guidance in the CBA Guidelines on how these costs should be quantified. This will allow AEMO to provide valuable information to policymakers on the costs of their policies for the whole system and, ultimately, consumers.

4.3 Insertion of transitional arrangements

This clause will ensure the 2024 ISP is transparent about the costs imposed on the electricity system model by jurisdictional policies as well as the whole of system costs under the optimal development path. This will be achieved through AEMO publishing an addendum to the 2024 ISP within 3 months of the rule change being finalised. There is great value in increasing transparency around costs for consumers as soon as possible. The rule change should also be finalised as soon as possible to ensure the new rules are applied to scenario design and selection for the 2026 ISP.

5. How the proposed rule change will or is likely to contribute to the achievement of the National Electricity Objective

The National Electricity Objective (NEO), set out in section 7 of the National Electricity 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.”

The achievement of targets “that are likely to contribute to reducing Australia’s greenhouse gas emissions” does not necessitate every jurisdictional target be included as a binding constraint on every ISP scenario. Consideration of the “price...of supply of electricity” is just as important and must be given appropriate consideration in the way scenarios are designed and chosen. As the AEMC stated on page 4 of the draft determination for the *Harmonising the rules with the updated objectives* rule change:

“The AEMC and AER intend to continue to balance the various components of the national energy objectives in our decision-making processes in a way that promotes the long term interests of consumers overall, as we have done previously.”

The proposed rule change is crucial to ensure the ISP better reflects the AER and AEMC’s goal stated above of balancing emissions reduction considerations with other interests of consumers covered by the NEO.

Including a baseline scenario without binding targets, particularly targets that are “likely” to contribute to reducing emissions but are not actually required for achieving emissions reduction targets (such as the 82% by 2030 target) is the best way to balance these objectives, along with including a range of scenarios representing plausible changes in policies. This maintains the centrality of jurisdictional policies to planning for future grid investments while also acknowledging that these policies may change over time, especially a multi-decade modelling horizon. The proposed rule change thus protects the long term interests of consumers by increasing transparency around policy and whole of system costs, and therefore price of electricity supply, while also pursuing the emissions reduction objective.

6. Expected costs, benefits and impacts

6.1 Expected benefits

Enhanced transparency around whole of system and policy costs and consideration of future changes in policy in the ISP would have several benefits to stakeholders, including:

For decision makers:

- Improved understanding of how jurisdictional policies affect whole of system costs, helping decision makers to reduce or expand targets and amend policies as needed to ensure consumers are not paying more than necessary.

For market participants:

- Greater transparency on the impacts on whole of system costs of particular projects will increase competition and allow market participants to more accurately identify good investment opportunities.

For consumers:

- Greater transparency around costs will 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 that the optimal development path is robust against the risk created by uncertainties around future policy changes.

For AEMO:

- More clarity around the role of the ISP as a whole of system plan and the central role AEMO plays in driving down costs for consumers through optimising investments in the energy system.

6.2 Expected costs

The proposed amendments will impose an additional cost on AEMO in preparing the ISP, including an additional cost for creating the 2024 ISP addendum, uplift in implementing the changes for the 2026 ISP, and an ongoing annual cost thereafter. These costs would result from necessary improvements to modelling, and potentially data collection, arising from the proposed rule changes. These costs are recovered from transmission network service providers through National Transmission Plan charges. These costs are anticipated to be relatively small compared to the significant benefits associated with greater transparency and future-proofing around optimal investments in the energy system.

6.3 Expected impacts

This proposed rule change seeks to impose additional requirements on AEMO during its ISP development process with respect to modelling the cost of policy constraints and calculating the whole of system costs. AEMO will be impacted by these rule changes as it effectively broadens what it must consider when preparing the ISP (policy costs, previously excluded system costs such as CER) and what it must include in the content of the ISP (assessments of policy costs and whole of system costs).

The baseline scenario is unlikely to be costly to model, as it can be modelled in a similar way to existing scenarios. The number of scenarios in the ISP has declined to only three in the 2024 ISP, meaning the addition of a baseline scenario will not be overly burdensome. There will be a need to increase the number of other scenarios to include a range of plausible policy developments, including where targets are missed, reduced or removed.

AEMO will likely need to rerun the ISP model for each policy to model its impact and costs on the whole system.

AEMO will also need to source data for currently excluded costs faced by consumers, most notably CER and distribution network upgrades. These will need to be included in the assessment of whole of system costs.

The transitional arrangements will mean AEMO must assess policy and whole of system costs for the model underpinning the 2024 ISP. However, there will be no need to create new scenarios for the 2024 ISP. The AER may wish to issue guidance to assist AEMO in determining the optimal method for communicating these model outputs in the 2024 ISP, pending an update to the CBA Guidelines that would apply to the 2026 ISP.

Proposed Changes to NER

Changes are proposed to version 211 of the National Electricity Rules (NER), available at <https://energy-rules.aemc.gov.au/ner/572>. Proposed insertions are in red.

5.22.5(d) The *Cost Benefit Analysis Guidelines* must in relation to the preparation of an *Integrated System Plan* by AEMO:

...

(2) require AEMO to test the robustness of alternative *development paths* to future uncertainties through the use of scenarios and sensitivities, **including scenarios representing plausible changes in policies of participating jurisdictions and a baseline scenario unconstrained by:**

(i) *emissions reduction targets* stated in the *targets statement*, and

(ii) energy and environmental policies of *participating jurisdictions*;

...

(7) require AEMO to include an assessment of whole of system costs as faced by consumers of electricity; and

(8) require AEMO to include impacts on whole of system costs of each energy and environmental policy of each *participating jurisdiction* considered by AEMO.

5.22.6(a) An *Integrated System Plan* must:

...

(4) identify the *optimal development path* which must be based on a quantitative assessment of the costs and benefits of various options across a range of scenarios, **including scenarios representing plausible changes in policies of participating jurisdictions and a baseline scenario**, in accordance with *Cost Benefit Analysis Guidelines*;

...

(8) include an assessment of whole of system costs as faced by consumers of electricity; and

(9) include impacts on whole of system costs of each energy and environmental policy of each *participating jurisdiction* included in any scenario.

11.171 Rules consequential on the making of the National Electricity Amendment (Making the ISP robust to policy change and clear on costs) Rule 2024

11.171.1 ISP Addendum on Policy and Whole of System Costs

Within 3 months of the commencement date, AEMO must publish an addendum to the most recent final *Integrated System Plan* that includes:

- (a) an assessment of whole of system costs as faced by consumers of electricity; and
- (b) impacts on whole of system costs of each energy and environmental policy of each *participating jurisdiction* included in any scenario.