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EnergyAustralia Pty Ltd
ABN 99 086 014 968

Level 19
Two Melbourne Quarter
697 Collins Street
Docklands Victoria 3008

Phone +61 3 9060 0000
Facsimile +61 3 9060 0006

enq@energyaustralia.com.au
energyaustralia.com.au

Clarifying the treatment of jurisdictional policies and system costs in the ISP — Consultation Paper — 9 October 2025

EnergyAustralia is one of Australia's largest energy companies with around 2.2 million electricity and gas accounts across eastern Australia. We also own, operate and contract a diversified energy generation portfolio across Australia, including coal, gas, battery storage, demand response, wind and solar assets, with control of over 5,000MW of generation capacity.

We welcome the opportunity to comment on the Commission's consultation on the Integrated System Plan (ISP). The Centre for Independent Studies, as the rule change proponent, focuses on two central elements of the ISP that we and other stakeholders have raised with AEMO in its earlier consultations. We expect these and other topics will be further agitated as part of the Commission's scheduled review of the ISP framework.

The proponent's rule amendments would:

- require AEMO to model a 'baseline' ISP scenario, with no jurisdictional policy constraints, as well as consider 'plausible' future policy changes by jurisdictions
- expand the ISP's "whole of system" planning to include material costs relating to consumer energy resources (CER), upgrades to distribution networks, recycling and disposal of renewables and payments to coal generators for life extensions
- require AEMO to estimate the costs of each jurisdictional energy and environmental policy.

While they are matters of public interest, it is not clear to us that these changes would address the problems the proponent has identified with the ISP, or better achieve the National Electricity Objective (NEO).

The proponent appears to assume that AEMO's current approach to modelling the ISP understates the cost of the transition, and that various policies may be suboptimal and unnecessarily adding to this cost. Its main argument is that AEMO's assessment is not in accordance with clause 5.22.10(a)(5)(ii), specifically that customers face increasing

costs from overinvestment, since various policy targets will not be achieved or may be changed:

> 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 overinvestment.[1]

In outlining the benefits of its proposed rule amendments, the proponent presupposes that the ISP can be made more transparent and form a robust basis for policy evaluation as well as investment decisions. Our expectation is that forcing AEMO to publish costings in the ways supposed by the proponent may be counter-productive to the public debate. Even within the relatively narrow scope of the ISP, AEMO's cost estimates are already subject to very high margins of error, and are frequently misrepresented. Forcing AEMO to evaluate the cost and merits of individual policies would draw AEMO and the ISP to increasing politicisation, which is something the proponent has elsewhere criticised.[2] While the proponent only mentions cost, a fulsome evaluation of policy targets would also include their benefits, which we would expect to reinforce rather than change AEMO's stance towards enabling new transmission investment.

Some of these problems relate to how the ISP is referred to and relied upon in the broader policy debate. The matters raised by the proponent may offer some scope for rule refinements, notably where AEMO can be compelled to have regard to certain matters, however this provides no guarantee that AEMO will materially alter its approach, or the ISP's optimal development paths (ODP) will be affected in the way that the proponent seems to expect.

Recognising the role of AEMO as the system planner, and governments of the day in setting key parameters, we recommend that best practice approaches are applied to decisions on policy targets before they are designated in the targets statement.

Our views are expanded below.

There are some issues in the design of AEMO's scenarios

AEMO's application of policy targets appears to be driving several aspects of its scenario design, which we would regard as questionable.

The 2024 ISP's Progressive Change Scenario achieved 2030 renewable targets by assuming the closure of major load, which appears to be more of a modelling convenience than part of a coherent scenario narrative. AEMO's inputs for the 2026 ISP also appear to reflect this outcome in the comparable Slower Growth scenario.[3] It should be noted, however, that AEMO considers this treatment of large industrial loads will be useful to explore over-investment risks, in addition to a separate 'low industrial load' sensitivity, which partly demonstrates AEMO's approach to matters raised in the rule change proposal.

The deterministic achievement of policy targets with subsequent editions of the ISP will see increasing convergence between scenario trajectories in the near to medium term. The 2024 ISP's Step Change and Green Energy Exports scenarios involved accelerated

[1] Centre for Independent Studies, rule change request, p. 1.
[2] Why I'm standing up to AEMO's Integrated System Plan - The Centre for Independent Studies
[3] 2025-inputs-assumptions-and-scenarios-report.pdf see page 107.

coal closures for to meet emission reduction trajectories, whereas Progressive Change used published closure dates. For the 2026 ISP, given the similarity in NEM emissions trajectories to 2030, we expect AEMO will require accelerated coal closures across all three scenarios, arguably reducing the value of the Slower Growth/ Progressive Change scenario as a lower "book end" of the pace of the transition.

These scenario features and outcomes may not have a material impact on AEMO's approach to designating Actionable transmission investments in each edition of the ISP, however do affect its overall credibility. The deliverability of investment tends to be ignored when the ISP, particularly the Step Change Scenario, is taken as a forecast. An example of this is the ESOO, which presents an alternative reliability assessment using the Step Change's demand 'forecast' and the same near-term government investment targets like the Capacity Investment Scheme and the NSW Infrastructure Investment Objectives.[4]

The ISP is intended to identify efficient grid investment

We agree with the Commission that clarifying the role of the ISP and its appropriate use will support all decision making wherever the ISP is relied upon.[5]

Clause 5.22.2 of the rules states that the purpose of the ISP 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 ISP arose as a recommendation of the Finkel Review in 2017, which was primarily concerned with the efficient and coordinated development of transmission or "grid" infrastructure, including renewable energy zones.[6] In line with this concept, the ISP designates Actionable transmission projects under clause 5.22.6(a)(5) which are then subjected to specific cost benefit assessments under the RIT-T framework. The timing of these projects (if they pass the RIT-T) is somewhat mandated and hence has a bearing on customer impacts. Whether this timing actually materialises is discussed below.

The ISP was not intended to be used to evaluate the merits of government policy. Government policies are taken as an exogenous input and treated within the definition of Power System Needs, along with other planning parameters, under clause 5.10.2. As an illustrative point, AEMO has no role in questioning the efficiency of the Interim Reliability Measure, which has been set by jurisdictional agreement and forms part of Power System Needs, even though it is in excess of customers' willingness to pay.[7]

While it may seem desirable in certain instances, we would strongly caution against expanding AEMO's roles into evaluation of policy and other planning parameters. The functions of the market bodies as well as the role of governments has been carefully defined in the Australian Energy Market Agreement and reflected in numerous law and rule provisions. More specifically, the creation of the targets statement as part of the 2023 amendments to the energy law objectives reflected a foundational change that underpins societal commitments to achieving emissions reduction and avoiding the negative consequences of climate change.[8] There should be robust and transparent

[4] 2025-electricity-statement-of-opportunities.pdf see page 43.
[5] AEMC, *Clarifying the treatment of jurisdictional policies and system costs in the ISP*, Consultation paper, 9 October 2025, p. 12.
[6] Independent Review into the Future Security of the National Electricity Market - Blueprint for the Future, see page 124.
[7] Reliability Panel, *2022 Review of the reliability standard and settings – Final report*, 1 September 2022, p. iv.
[8] Second Reading Speech, Statutes Amendment (National Energy Laws) (Emissions Reduction Objectives) Bill 2023, Hansard, South Australian House of Assembly, June 14, 2023 (The Hon A Koutsankounis).

debate on particular targets and policy interventions, however the significance of the ISP is already overstated in this debate and AEMO should not be further drawn into this.

There are better mechanisms to assess the merits of government policy

The Commission asks whether policy evaluation can be more appropriately addressed outside the national energy framework.[9] Regulatory Impact Statements and similar best practice assessments already exist which, per government guidelines[10], should be prepared to support major government and regulatory decisions. Provisions in the energy laws could be amended to require policy targets to be accompanied by such an impact or cost benefit assessment as a prerequisite for being identified in the targets statement. There may also be a role for agencies like the Productivity Commission or its jurisdictional equivalents as part of this process.

The ISP is not a forecast

The ISP's Step Change scenario has become synonymous with "the ISP" to the exclusion of other scenarios and sensitivities, which reflect important uncertainties on a range of inputs, not just policy targets. Even if taken as a forecast or central scenario, the 2024 Step Change scenario was assigned 43 percent weighting, marginally above Progressive Change. The Step Change scenario has been designated 'most likely' as an unintended use of terminology in clause 5.22.5(e)(3), which requires scenarios to be assigned weightings of their relative importance, not an absolute probability of occurring. The Commission could review this terminology such that it signifies such a weighting. In parallel with its Delphi approach, AEMO could also be required to survey and publish stakeholder views on the absolute rather than relative likelihood of particular scenarios. This may provide a useful reflection of the plausibility of targets or other assumptions, while also retaining AEMO's independence from policy evaluation.

Requiring AEMO to consider 'plausible' jurisdictional policies

The proponent raises valid questions regarding the extent of AEMO's discretion in modelling policy targets as Power System Needs. Our exploration of this tends to highlight the value of the ISP rather than a weakness.

A key principle of scenario modelling is that, in exploring the range of future states of the world, the chosen scenarios should be plausible. There does not appear to be any legal restrictions on AEMO to do this. For example, the AER's Cost Benefit Analysis guidelines only designate plausibility as a "discretionary" principle for AEMO to follow when selecting inputs and designing scenarios.[11] We do not see any reason why this should not be a mandatory consideration.

The plausibility of AEMO's policy inputs has been frequently raised, particularly for the Australian Government's 2030 renewable energy target and the increasingly rapid pace of investment required to achieve this. AEMO's response to stakeholders on its application of clause 5.22.3(b)(1) has been firm and encapsulated as follows:

> AEMO must consider the emissions reduction targets stated in the AEMC's emissions targets statement as required by NER 5.22.3(b)(1). Emissions reduction targets are defined in the NER to mean targets set by jurisdictions for reducing greenhouse gas emissions or which are likely to contribute to reducing emissions. The targets statement is structured to reflect these two categories of targets. The requirement for

[9] AEMC, p. 16.
[10] Australian Government Guide to Policy Impact Analysis | The Office of Impact Analysis
[11] AER - Cost Benefit Analysis guidelines - 2024 - Version 3.pdf pages 10 and 13.

> AEMO to consider the targets supports Australian governments' intention that the targets statement provides a publicly available, up-to-date list of government targets that decision-makers, including AEMO, must take into account at a minimum when having regard to achieving the emissions reduction element of the NEO. AEMO therefore includes all policies in the AEMC targets statement as inputs to the ISP's development, meaning the ISP modelling results will demonstrate collectively what is required to meet these policies.[12]

AEMO's approach effectively presumes that any policy gaps and other efforts involved in in achieving government targets will be addressed. This leads AEMO to make a series of recommendations which appears to be consistent with the NEO in terms of articulating key enablers of achieving policy targets that is least cost to consumers. See for example section C of the 2024 ISP. The Commission has also noted that achieving jurisdictional targets via efficient investment is aligned with the NEO.[13]

As noted by the Commission, AEMO published a 'constrained supply chain' sensitivity in its 2024 ISP where certain policy targets were not achieved.[14] We requested AEMO to expand this analysis, with the purpose of highlighting the societal cost of such policy failure.[15] The proponent wishes to go further such that this outcome forms part of AEMO's core scenario modelling and directly impacts candidate development path. Doing so would seem to reinforce the likelihood of not achieving government targets, either directly by delaying Actionable transmission projects, or indirectly by placing less emphasis on the policy, technical and other factors that would enable the transition at least cost.

Modelling less ambitious targets is unlikely to change actual investment timing

We do not consider AEMO's current approach presents a credible risk of over-investment primarily because of the various factors that are now leading to investment delays.

AEMO's approach to determining the ODP also reflects the consequences of building network capacity ahead of need as a low regret outcome.

Furthermore, the optimal timing of many Actionable transmission projects was ahead of the dates designated in the 2024 ISP i.e. AEMO is already "targeting" delayed investment. The earliest feasible delivery dates of these projects are provided by proponents and not AEMO, although AEMO has an important role in validating these and does assume delays in its modelling.

To the extent the ISP provides a mandate for Actionable transmission projects and their optimal (or earliest feasible) timing, the rules currently require project proponents and the AER to assess deliverability of investment. There should be more explicit consideration of these deliverability aspects and their impact on cost or feasibility as part of AEMO's input assumptions or modelling approach. AEMO already undertakes a variety of ancillary modelling of shorter term timeframes, system security parameters, workforce impacts etc to validate its candidate investment pathways. This has been an area of continual improvement with ISP editions. It is not clear to us that rule or AER guideline amendments would better enable this.

[12] 2025-inputs-assumptions-and-scenarios-report.pdf p. 27.
[13] AEMC, p. 12.
[14] a6-cost-benefit-analysis.pdf see section A6.8.5.
[15] energyaustralia.pdf

Costing policies off a baseline 'no policy' scenario

The proponent's suggestion of modelling a baseline scenario, unconstrained by emission reduction targets or energy and environmental jurisdictional policies, appears to relate to its separate suggestion of providing individual costings for said policies.

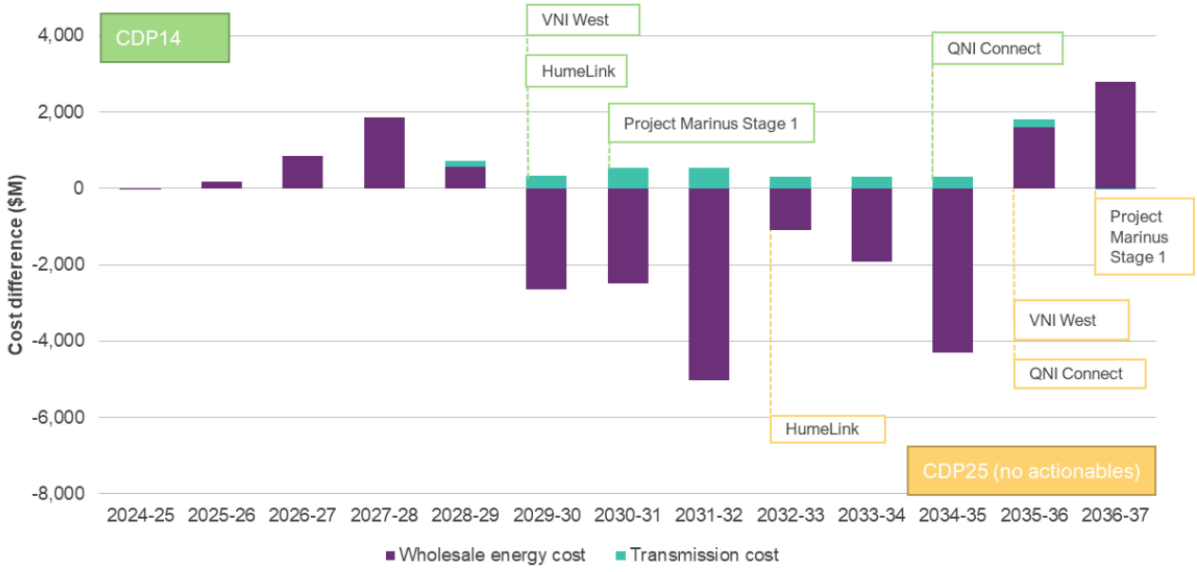
In theory, this is useful information for policy-makers but it is unclear what bearing it would have on ODPs. The rule change proposal only asks for costs of policies to be made explicit, without any mention of their benefits. If the ISP's counterfactual scenarios were genuinely 'no policy', we would expect to see very significant emissions reductions benefits of the 'with policy' scenarios.

In practice, isolating the effect of individual policies may be difficult, given many overlap and are expressed as a single emission constraint. These costings would also be subject to wide error margins and open to misinterpretation by vested interests.

AEMO can do better analysis of price/ cost outcomes for customers

We see value in AEMO providing further transparency on wholesale price outcomes that are produced in its optimisation modelling. AEMO's 2024 ISP published information on the 'distributional effects' of the ODP in accordance with the AER's cost benefit assessment guideline (example Figure 30 below). In doing so AEMO listed a host of complicating factors and assumptions affecting the costs that customers actually face. As illustrated below these were published as aggregated values for the NEM.

Figure 30 Average year-on-year distributional effects under *Step Change*



Source: AEMO

We question whether this adequately satisfies the need to highlight equity issues that are otherwise ignored in aggregated cost benefit assessments. AEMO's approach deals with intertemporal effects and at a minimum we consider it feasible to disaggregate this to NEM regions, where we expect to see materially different technology mixes and transmission investment needs. We have also seen significant increases in cost estimates for Actionable transmission projects, and being able to illustrate their expected impacts on wholesale price outcomes will be important as their costs via network charges become more visible as bill impacts.

We accept that modelling price implications for end use customers is beyond the scope of the ISP. AEMO could be compelled to publish a 'raw' dataset to help other agencies

with price projections, including the Commission in its retail price trends reporting. Conversely the Commission should consider the extent to which such price information would be subject to misuse or misinterpretation, irrespective of how it is presented.

Expanding the "whole of system"

The proponent does not appear to specify its specific concerns with AEMO's current scope of modelling. AEMO is already attempting to incorporate elements of gas and distribution networks into its analysis. Presenting costs and benefits for transmission, and grid-scale generation and storage, is already subject to wide margins of error. Including electricity distribution networks, which have many multiples of elements and parameters, into a system optimisation model would involve considerable effort. Given the scale of distribution networks, their inclusion would also heavily influence the calculation of net benefits. While this appears to be what the proponent expects, it would be highly inaccurate and not form a robust basis for determining ODPs or any other findings. We also agree with the Commission that introducing a wide range of new and material parameters would leave the ISP subject to significant changes in ODPs between editions of the ISP, undermining long-term planning objectives.[16] Our expectation is that widening the scope of costings (and policy parameters) would open up the ISP to significant and likely wasteful debate. AEMO is already bound to consider the cost of additional modelling effort and other practicalities under clause 5.22.10(c)(3), and mandating the inclusion of adjacent sectors should have regard to similar principles.

Decommissioning and other end of life costs for renewables (and all technologies) should be within the scope of AEMO's input assumptions. Funding life extensions for coal plants should arguably also be within AEMO's scope. Capturing these in optimisation modelling may, however, be difficult as these agreements contain confidential and bespoke terms.

The other proposed amendments appear infeasible and expensive

The proponent suggests AEMO should be required to reconsider the 2024 ISP based on its proposed rule amendments. AEMO would be required to publish an addendum within 3 months of new rules requirements taking effect. The proponent also appears to presume that the 2026 ISP (the draft of this due in one month from now) would be covered by its proposed amendments.

Revising any ISP would involve significant resourcing for AEMO, with material costs that are ultimately paid for by consumers. It would also take far longer than 3 months to develop new sets of input parameters and method changes to facilitate what the proponent requests. This time and effort would come at a high opportunity cost for AEMO's existing work programs, as well as any stakeholders engaging in these revisions.

If you would like to discuss this submission, please contact me on 03 9060 0612 or Lawrence.Irlam@energyaustralia.com.au.

Regards

Lawrence Irlam
Group Manager Regulatory Policy

[16] AEMC, p. 17.