Justice and Equity Centre

Draft 2026 Integrated System Plan

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Justice and Equity Centre
ABN 77 002 773 524
www.jec.org.au

Gadigal Country
Level 5, 175 Liverpool St
Sydney NSW 2000
Phone + 61 2 8898 6500
Email contact@jec.org.au

About the Justice and Equity Centre

The Justice and Equity Centre is a leading, independent law and policy centre. Established in 1982 as the Public Interest Advocacy Centre (PIAC), we work with people and communities who are marginalised and facing disadvantage.

The Centre tackles injustice and inequality through:

- legal advice and representation, specialising in test cases and strategic casework;
- research, analysis and policy development; and
- advocacy for systems change to deliver social justice.

Energy and Water Justice

Our Energy and Water Justice work improves regulation and policy so all people can access the sustainable, dependable and affordable energy and water they need. We ensure consumer protections improve equity and limit disadvantage and support communities to play a meaningful role in decision-making. We help to accelerate a transition away from fossil fuels that also improves outcomes for people. We work collaboratively with community and consumer groups across the country, and our work receives input from a community-based reference group whose members include:

- Affiliated Residential Park Residents Association NSW;
- Anglicare;
- Combined Pensioners and Superannuants Association of NSW;
- Energy and Water Ombudsman NSW;
- Ethnic Communities Council NSW;
- Financial Counsellors Association of NSW;
- NSW Council of Social Service;
- Physical Disability Council of NSW;
- St Vincent de Paul Society of NSW;
- Salvation Army;
- Tenants Union NSW; and
- The Sydney Alliance.

Contact

Michael Lynch, PhD
The Justice and Equity Centre
Level 5, 175 Liverpool St
Sydney NSW 2000

T: +61 2 8898 6500
E: mlynch@jec.org.au

Website: www.jec.org.au

The Justice and Equity Centre office is located on the land of the Gadigal of the Eora Nation.

Contents

Recommendations

Increasing accuracy and precision in the ISP

Recommendation 1: That the implicit caveats accompanying the claim that the ODP represents the most cost-effective development path for the energy system should be made transparent and should accompany every iteration of the claim that occurs in the ISP. That is – it should be made clear the ODP refers only to optimal transmission pathway.

Increasing transparency in the ISP

Recommendation 2: That the constitution of the counterfactual development path – including what investments and other factors it assumes - should be made transparent and AEMO should arrange a consultation process to develop it before the 2026 ISP is produced.

Recommendation 3: That AEMO remove potentially misleading implications that movements of transmission projects from 'actionable' to 'committed or anticipated' between the publication of the 2024 ISP and Draft 2026 ISP represent 'savings' or a reduction in the cost to consumers of the transition overall.

Recommendation 4: That the data used and produced in the ISP scenario weighting process should be made public, along with the methodology used to produce the data and derive the scenario weightings themselves.

Treatment of jurisdictional policies recommendations

Recommendation 5: That AEMO adjust the framings of jurisdictional and federal policies that under-write investments to note that investments (and the transition) are not being 'de-risked', but rather that risk is being assumed by consumers.

Recommendation 6: That AEMO suspend the assumption government policies will not be replaced when they expire. As a methodological practice, these policies should be assumed to be replaced with like for like policies unless information exists to the contrary.

Recommendation 7: That AEMO undertake some assessment of the viability of all jurisdictional policies and provide their assessments in standard forms for degree of confidence and direction of skew – error bars and p-values – to inform further development of policies.

Demand side factor recommendations

Recommendation 8: That the Demand Side Factor Statement be adjusted to consider the value of demand side factors themselves, including their capacity to replace network investments and delay the optimal delivery times of network investments.

Recommendation 9: That a framework for identifying the efficient level of network curtailment be added to the ISP. This should recognise that the efficient level of curtailment is changing and rises with the increased penetration of coincident generation.

Recommendation 10: That the Demand Side Factor Statement identify and quantify risks of enabling increased export of coincident generation.

Recommendation 11: That behind-the-meter batteries be considered in light of their potential to contribute to the resolution of distribution network curtailment issues.

Coal generator availability assumptions

Recommendation 12: That assumptions around coal generator availability rate be added to the ISP to replace or augment included coal generator capacity information. These coal generator availability rates should be made on a generator-by-generator basis and change over the period in question.

Quantification of uncertainty

Recommendation 13: That AEMO add indications of the degree of confidence and the direction of skew to every projection which appears in the ISP.

Forward-looking incidence of cost

Recommendation 14: That AEMO analyses the incidence of costs identified in the ISP and provide a relative assessment of the relative proportions carried by households and industrial uses. This analysis should be compared with the relative benefit from these investments – for instance, in the form of relative demand.

The cut-off date for updating data and inputs to the ISP

Recommendation 15: That AEMO use 31 December 2025 as the cut-off date for additional data to the ISP, and in any case set the cut-off date as late as possible.

1. Introduction

The Justice and Equity Centre (JEC) welcomes the opportunity to respond to the Australian Energy Market Operator's (AEMC) Draft 2026 Integrated System Plan (the draft 2026 ISP).

The JEC supports the aims of the ISP and AEMO's central role in coordinating the transition.

The draft 2026 ISP continues to demonstrate improvement in its engagement with stakeholders, and improved analysis.

However, the ISP is still only empowered to compare bundles of transmission projects in deriving the optimal development path (ODP). It does not seek to co-optimise all elements of the energy system, and so cannot credibly claim to identify the path of least cost for consumers. Rather, it identifies the least cost bundle of transmission projects modelled across three different scenarios and tested against a set of sensitivities. This is not without value but falls short of the intended – and claimed – optimal plan for the transition of the energy system.

While this issue of a lack of co-optimisation cannot be resolved in the 2026 ISP it should be at the center of further reform considerations for the ISP. We intend to address this in detail in a rule change proposal to be submitted in the coming weeks.

Beyond these future, substantive reforms, this submission addresses a number of changes recommended for the 2026 ISP, intended to minimise the impacts of limitations in the current approach. We identify a set of areas in which communication of the results of the ISP can be made more accurate and precise, and areas in which greater transparency is required.

We acknowledge that, interpreted one way, some of our recommendations may appear to weaken the argument of the ISP. This is not the intent, and we contend that more accurate and precise articulations of the outputs of the ISP increase the robustness, validity and impact of the ISP and are ultimately in consumers' interest.

2. The ODP is not the least cost path of transition

The ODP identified in the Draft ISP is not the least cost development path for the transition.

As it stands the ODP is the least cost bundle of transmission projects given anticipated developments across the rest of the energy system, modelled across three scenarios and tested against a range of sensitivities. The least cost path of transition could only be identified by comparing co-optimised bundles of interventions in all elements of the energy system, not merely transmission.

In making this criticism, we do not suggest that the Draft ISP is without merit or value. It is a valuable and complex piece of work shaped by the limitation imposed on AEMO. Unfortunately, it is a limitation that prevents AEMO from fulfilling the purpose of the ISP as defined in the National Electricity Rules (NER).

Until the ISP is reformed to address this, any inference that the ODP is a genuinely 'optimal' pathway risks undermining the validity of the narrative of the document and the social license afforded to the transition as a whole. We recommend the final document be amended to address this.

2.1 A circumscribed ODP increases costs to consumers

Limiting AEMO to transmission projects in its task of identifying the ODP results in consumers paying more for their energy and the transition than they otherwise could. This occurs as resources are inefficiently allocated by decision-makers influenced by the ISP.

Transmission is no longer the low-hanging fruit of the energy transition. Transmission costs and build-times have both substantially exceeded expectations set at the start of the transition, and continue to suffer cost and time blowouts.

Being limited to recommending bundles of transmission means AEMO does not set out to identify the most efficient marginal investment in the energy system, or the bundle of investments that most efficiently effects government targets and the reliability standard. As a result, it produces a pathway at higher cost to consumers than necessary.

We expand this argument and provide a solution in our forthcoming rule change proposal.

2.2 Transparency, accuracy and precision in the ISP

The imprecision and 'over-statement' of the findings of the ISP risk undermining its credibility. We are concerned this gives unearned credence to bad faith criticisms of the ISP, AEMO, and the energy governance regime as a whole from commentators opposed to the transition itself.

In order to mitigate these risks, we propose the following changes to enhance the transparency of the ISP and the precision and accuracy of the claims made in it.

2.2.1 Accurately characterising the ODP

The claim that the ODP is the least cost path for the development of the energy system is currently made with a set of implicit caveats which should be made explicit in the interests of clarity and transparency.

The ODP should be described as:

The least cost bundle of transmission projects given the anticipated developments across the rest of the energy system, considering the implications of these investments for new generation and storage investments, and modelled across three scenarios and tested against a range of sensitivities. That is – *the least cost bundle of transmission projects.*

A second inaccuracy by implication occurs in the language that suggests that the ISP co-optimises investments in generation, storage, and network capacities. For example, on page 10 the Draft ISP claims that "the proposed ODP is put forward as the optimal mix of grid-scale generation, storage and network investments" and on page 46 it claims that "[a] candidate ISP development path is a mix of potential generation, firming and network infrastructure that meets the government policies to 2050 reliably and securely".

This is not accurate; analytically speaking, the former two are implications of the possible transmission investments being compared, not outcomes of a process of co-optimisation.

Finally, the word ‘network’ here has a contextual meaning of ‘transmission network’, rather than the standard understanding of the ‘the network’ comprising of both the transmission and distribution networks. This should also be amended for the purposes of precision.

Recommendation 1

That the implicit caveats accompanying the claim that the ODP represents the most cost-effective development path for the energy system should be made transparent and should accompany every iteration of the claim that occurs in the ISP. That is – it should be made clear the ODP refers only to the optimal transmission pathway.

2.2.2 Clearly defining and explaining a robust counterfactual

The candidate development paths should be clearly explained as exclusively comprised of transmission projects.

The implication that the candidate development paths (CDPs) comprise bundles of investment beyond potential transmission projects is confused by the definition of the counterfactual as a “development path without any new transmission build” (p. 48). If the CDPs are comprised of more than bundles of transmission projects - as may be reasonably inferred from the draft - a counterfactual defined by an absence of transmission may appear to be inappropriate. This can only be resolved by explaining that the CDPs are defined exclusively by the transmission projects and timings they are comprised of.

Secondly, the assumptions made in constituting the counterfactual should be made transparent, and input should be sought on these before the final ISP is published.

Logically, the counterfactual must meet all government targets concerning emissions reductions, as well as reliability requirements (the ‘power system needs’) over the period. If it does not do these things, it is not a meaningful comparator.

Therefore, what investments occur in the counterfactual, how they are modelled, and what benefits are modelled as returning to consumers are all extremely pertinent to the central claims being made in the ISP and to investment decisions that are made on behalf of consumers. Without knowing what the investments are or how the costs and benefits are modelled limits the degree to which consumer advocates and other stakeholders can engage with the claims made in relation to the counterfactual or prosecute the case that investments in the counterfactual may be more attractive to consumers than investments in transmission projects.

Providing full transparency on the construction of the counterfactual is in the interests of consumers. It empowers decision-makers to make investments which are in the best interests of consumers, enables these decisions to be understood, and empowers advocates to promote them.

Recommendation 2

That the constitution of the counterfactual development path – including what investments and other factors it assumes – should be made transparent and AEMO should arrange a consultation process to develop it before the 2026 ISP is produced.

2.2.3 False 'savings' relative to the 2024 ISP

Updated ISP costs to consumers must be presented transparently and accurately.

Page 18 notes that one of the reasons for a reduction in the cost of the ODP in the Draft 2026 ISP relative to the 2024 ISP is "recent progression of projects towards construction". We understand this to mean that the statuses of certain transmission projects have moved from 'actionable' to 'committed or anticipated'.

The 2024 ISP figure refers to the entire cost outlay for the transition out to 2050 and the Draft 2026 ISP refers to the entire cost outlay for the transition out to 2050 minus the projects that have moved from 'actionable' to anticipated'. The costs being 'saved' in the comparison still exist and they are still paid for by consumers. The suggestion that this is in any way a cost reduction is not an accurate representation and risks the credibility of the process. The point should be removed and comparisons should be made on like for like objects only.

Recommendation 3

That AEMO remove potentially misleading implications that movements of transmission projects from 'actionable' to 'committed or anticipated' between the publication of the 2024 ISP and Draft 2026 ISP represent 'savings' or a reduction in the cost to consumers of the transition overall.

2.2.4 The weighting process

The process of weighting ISP scenarios, the data produced, and the method of deriving the scenario weightings should be made transparent. The opacity of this process diminishes the confidence with which decision-makers can use the scenario weightings and, as a result, the ISP as a whole.

Recommendation 4

That the data used and produced in the ISP scenario weighting process should be made public, along with the methodology used to produce the data and derive the scenario weightings themselves.

3. Treatment of jurisdictional policies

3.1 Clarity of terminology

References should clearly distinguish between government 'targets' and government 'policies'.

Page 6 of the Draft ISP states that "[g]overnment targets are de-risking Australia's transition." Government targets here, peculiarly, refers to federal, state and territory policies in place to support private investors make up the shortfall in generation and storage needs created by the

retirement of coal generation. This should be changed to refer to government policies, rather than targets as the targets are something else and do not de-risk the transition in any way – they simply identify the targets associated with it.

3.2 Correctly describing the purpose of policy

More importantly, government policies underwriting investments in new generation and storage do not 'derisk' the transition. They simply move risk from investors to consumers or taxpayers. This may 'de-risk' investments from the perspective of investors, but they do not de-risk the investments or the transition. Consumers/taxpayers still face the costs associated with these risks, even if investors do not. This line should be changed to reflect this:

'Government policies are facilitating the transition by having consumers/taxpayers reduce the risks faced by investors.'

Recommendation 5

That AEMO adjust the framings of jurisdictional and federal policies that under-write investments to note that investments (and the transition) are not being 'de-risked', but rather that risk is being assumed by consumers.

3.3 Assuming policy continuity

The implicit assumption that current government policies will not be replaced should be dropped. For methodological purposes, existing policies should be presumed to remain in place for the duration of the period modelled.

The practice of assuming government policies expire at their stated dates and don't get replaced with anything inadvertently raises the status of an extremely unlikely future to a base case scenario. This may have the effect of – by implication – assuming that any work done to effect the transition from the period of the expiry of today's government policies must fall to the ISP as it is the only tool left. The result of this methodological choice is to place undue pressure on the ISP and risk investment in transmission over and above the efficient level, paid for by consumers. This needs to be corrected.

Recommendation 6

That AEMO suspend the assumption government policies will not be replaced when they expire. As a methodological practice, these policies should be assumed to be replaced with like for like policies unless information exists to the contrary.

3.4 Enabling assessment of jurisdictional policies

The JEC considers it appropriate that AEMO undertakes some form of assessment of the viability of declared jurisdictional policies. Though we note that we do not consider this rising to the level of invalidation as proposed in the Centre for Independent Studies' rule change – that is, assessing whether or not government targets themselves are consumer net benefit positive.

Consumers do face the risk of bearing the costs of inefficient investments made as a result of presuming government policies will be delivered. In instances where there is a substantial risk

that the policies will not be delivered, with material potential impacts on other decisions, it is appropriate and in consumers' interests that AEMO assess these risks and communicate its assessments transparently.

Recommendation 7

That AEMO undertake some assessment of the viability of all jurisdictional policies and provide their assessments in standard forms for degree of confidence and direction of skew – error bars and p-values – to inform further development of policies.

4. The Demand Side

The JEC supports the intent in this ISP to incorporate analysis of distribution network capabilities and opportunities as part of moves to a genuinely co-optimised development pathway.

However, the move to consider "distribution network development opportunities to support CER and other distributed resources" (p.42) is an unnecessarily limited interpretation of the 'demand side factors' integration called for by energy ministers in the 2024 ISP Review.

Leaving demand side elements as an input assumption for ODP modelling, not one optimised alongside grid-scale elements, undermines the central claim that the ODP represents the least cost path to deliver the transition.

CER contributions (specifically CER coordination and supporting energy efficiency) reduce grid-scale investment requirements and deliver very substantial cost savings. Identifying the optimal level of uptake of various CER resources and noting the impact of this on the optimal network developments needed should then be central to the task of the ISP.

4.1 The Demand Side Factor Statement

While we support the requirements of the Demand Side Factor (DSF) Statement in clause 5.22.6A of the NER, the DSF Statement that accompanies the Draft ISP remains problematic. We note four concerns in relation to it.

4.1.1 Considering demand side factors holistically

The document appears to be exclusively interested in the implications of DSF dynamics that result in increased network investments. There is no interrogation of the dynamics to enable uptake of DSFs rendering network investments unnecessary, or delaying the timing of network investments. This is not in consumers' interests.

There is a risk that an under-appreciation of DSF take-up leads to AEMO recommending unnecessary network investments, or recommending delivery dates of network projects earlier than is optimal. This would cause unnecessary increases in energy costs to consumers.

Treating DSF uptake exclusively as a problem for networks, and then seeing increased network investment as the only possible solution to the problems caused by DSF uptake is limited, and a more balanced and appropriate approach should be taken for future iterations of the DSF Statement.

Recommendation 8

That the DSF Statement be adjusted to consider the value of DSFs themselves, including their capacity to replace network investments and delay the optimal delivery times of network investments.

4.1.2 Considering optimal curtailment

Efficient curtailment is a critical part of promoting an efficient, renewable energy system. A formal and transparent framework for identifying what constitutes an efficient curtailment rate at each stage of the transition must be developed as a matter of urgency.

Importantly, it is not the case that a rising curtailment rate must imply a decrease in efficiency, as is implied in the DSF Statement. In fact, the opposite is true: the optimal rate of curtailment will grow as the penetration of renewable resources increases (and the occurrence of coincident generation increases).

Maintaining the same rates of curtailment in the context of a network hosting increasing generation implies increased network investment. However, as the coincidence of generation rises over time, the economic value of the coincident generation falls. It follows that the marginal returns on investments that enable dispatch from those resources will also fall over time.

Recommendation 9

That a framework for identifying the efficient level of network curtailment be added to the ISP. This should recognise that the efficient level of curtailment is changing and rises with the increased penetration of coincident generation.

4.1.3 Minimum system load

There is insufficient acknowledgement of the risks associated with enabling increasing levels of coincident generation to be exported on to the grid – namely the risks associated with minimum system load. These risks should be identified and quantified and used to temper the value of distribution network investments aimed at minimising curtailment.

Recommendation 10

That the DSF Statement identify and quantify risks of enabling increased export of coincident generation.

4.1.4 Recognising the role of demand side batteries

Fourth and finally, we note that demand-side batteries are not listed among the 'types of investment that can reduce curtailment' on page 16 of the DSF Statement. This should be amended. Demand side batteries can offer a cheaper alternative to network constraints than network investment in many situations. As they offer multiple income streams, the incentive needed to invest in order to resolve an identified network constraint is much lower than a network investment.

Recommendation 11

That behind-the-meter batteries be considered in light of their potential to contribute to the resolution of distribution network curtailment issues.

5. Other matters

5.1 Coal availability assumptions

The final ISP should include more robust information and analysis on coal generator availability rates, rather than just assumptions of coal generator fleet capacities across the three scenarios. As a key provider of dispatchable energy, coal generator outages currently constitute a key threat to reliability outcomes over the period and so materially impact the optimal rates of investment in other resources.

Assumptions around coal generator availability rates should not be constructed on an entire fleet basis, but rather be de-aggregated, preferably on a generator-by-generator basis. Average rates across the NEM over the period will substantially distort the projections for individual generators and not capture significant analytical points. As the most obvious example, availability rates will fall over the period; failure to acknowledge this will result in underestimation in the early part of the period and overestimation in latter part.

Recommendation 12

That assumptions around coal generator availability rates be added to the ISP to replace or augment included coal generator capacity information. These coal generator availability rates should be made on a generator-by-generator basis and change over the period in question.

5.2 Quantification of risks calculated in the ISP

Confidence of projections – communicated using error bars and p-values – should be added to every projection in the ISP, including the core metrics, such as the anticipated increases in operational demand in each scenario.

There are many projections in the ISP that currently lack standard indications of degrees of confidence or probability skewing. This is not appropriate for a document as significant as the ISP and substantially reduces its value in informing investors, policymakers and other stakeholders' decisions, and so coordinating the development of the energy system.

Recommendation 13

That AEMO add indications of the degree of confidence and the direction of skew to every projection which appears in the ISP.

5.3 Incidence of investment costs

AEMO should commence a process to analyse the incidence of costs identified in the ISP, with respect to the relative share carried by households and industry. This should be compared to an assessment of the incidence of expected benefits resulting from these investments.

We highlight the remarkable finding that despite the sharp increases in operational demand over the period forecast, the operational demand accounted for by the household sector is anticipated to fall. This would appear to indicate an expectation of increased relative cost burden falling on households. In any case, it is not clear that the incidence of costs outlined in the ISP will conform to these dynamics. In particular, there are some structures, such as the NSW Roadmap, which can be anticipated to push the incidence of costs to diverge substantially from the incidence of benefits of these investments. A robust and transparent assessment of relative costs and benefits can help inform discussion and further policy development. It is also critical to help maintain the social license and legitimacy of the transition in the community.

Recommendation 14

That AEMO analyses the incidence of costs identified in the ISP and provide a relative assessment of the relative proportions carried by households and industrial uses. This analysis should be compared with the relative benefit from these investments – for instance, in the form of relative demand.

5.4 Cut-off date for inputs to the ISP

The cut-off date for data and other updates should be set as late as possible as to ensure the ISP is as relevant and contemporary as possible.

We are aware that AEMO faces a tight balancing act between updating the inputs to the ISP and allowing adequate processing time to produce the ISP on time. Given the speed at which the energy landscape is changing – in particular the cost of battery storage, and the material impact this can have on the outcomes – we urge AEMO to set the cut-off date for data and other updates as late as possible and propose 31 December 2025 as the cut-off date.

Recommendation 15

That AEMO use 31 December 2025 as the cut-off date for additional data to the ISP, and in any case set the cut-off date as late as possible.

5.5 Change of name for scenarios

The JEC supports the proposals to change the names of the ‘Progressive Growth’ scenario to ‘Slower Growth’ and ‘Green Energy Exports’ to ‘Accelerated Transition’.

6. Continued engagement

We welcome the opportunity to meet with AEMO and other stakeholders to discuss these issues in more depth. Please contact Michael Lynch at mlynch@jec.org.au regarding any further follow up.