

# Enhancing the Integrated System Plan to Support the Energy Transition

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## 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.

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# 1. Introduction

The Justice and Equity Centre (JEC) welcomes the opportunity to respond to the Australian Energy market Commission's (AEMC) consultation paper on enhancing the Integrated System Plan (ISP) to support the energy transition (the consultation paper).

We understand the intent of the Better integrating social licence proposed rule change (social licence rule change) is to improve the accuracy of cost estimates for large transmission projects. The JEC supports this. However, it must be done in a way which does not provide incentive for bad faith behaviour. Specifically, the assessment of the costs of acquiring social licence should be based on 'real' variables which are measurable and assessable.

We understand the intent of the Better integrating gas proposed rule change (gas rule change) is to improve the inputs of the Integrated System Plan (ISP). While we support this intent, this support comes with a number of important qualifications. The ISP should be genuinely technology neutral, focussing on the most efficient options to meet identified need. Consideration of greater gas integration must also include consideration of storage (battery and pumped hydro) and demand response options. These compete directly with gas for the provision of firming services. Any recommendation about where gas developments should occur cannot make claims about efficiency or optimality without reference to the alternative solutions to identified needs.

The assessment of all options must be realistic. In the case of gas, this means gas must be modelled in terms of both generation and supply. Supply costs must appear in the Inputs, Assumptions and Scenarios Report, and AEMO's assessments of the cost of gas options should be locationally specific. Failure to include all costs involved in each option will render the comparative assessment exercise fundamentally inaccurate.

We understand the intent of the Improving consideration of demand-side factors proposed rule change (demand rule change) is to improve the inputs to the ISP. The JEC has consistently advocated for the ISP to transition into orchestration and we support measures to improve the consideration of demand-side factors as an input to the ISP, and the intention to begin the work of enabling orchestration to occur. We have seen no reasoned argument establishing why it is not possible to include demand response and more scope for orchestration in the 2026 ISP.

The assessment criteria for the proposed rule changes does not include emissions reductions. This omission is not in keeping with the National Electricity Objective (NEO). Adding emissions reductions impacts is critical to assessing the optimal development path through the transition of the energy system.

## 2. The changing role of the ISP

We support the work of the ECMC considering the fitness for purpose of the ISP, and their intent to improve the effectiveness and influence of the ISP in efficiently guiding investors, governments and the public.<sup>3</sup>

The ISP is (or should be) a coordinating mechanism and a central reference to optimise the transition from a systemic perspective. The ISP must evolve in order to remain relevant, impactful, and fit for purpose.

### The new energy system has more investors

While transmission infrastructure build out is a necessary component of the energy system's transition to a renewable energy base, it is not the only investment needed. The set of actors making investment decisions in the NEM is expanding due to

- The rise of renewable utility scale generation, with the average generation unit being markedly smaller than the dominant generators in the traditional system (ie. coal generators);
- The rise of consumer energy resources as a structurally significant component of the grid, adding millions of households and businesses as producing and investing actors, where previously they were merely energy users;
- The rise of batteries and other storage providers to meet the firming (and ancillary service) needs of the new system;
- The rise of new retail service providers, such as virtual power plant providers;
- The new network service needs of the grid no longer automatically provided by the large fossil fuel generators (ie. various system security needs), and the rise of providers that offer these services.

In the move to a more complex network, the role of the ISP is to coordinate the activities of many more actors, responding to many more variables, with much more scope for different decisions to be made. Efficient investment from all these actors will not be guided by clear investment signals to transmission providers alone.

### The rise of jurisdictional planners

Arguably many of the consequential planning decisions over coming years will be made by transmission network service providers (TNSP) and state planners. Increasingly the ISP is a plan for the gaps between state commitments in terms of transmission, generation, and storage. If it remains in this form, the role of the document as a central planning tool coordinating the actions of the array of stakeholders will diminish. We will not have an authoritative planner providing prescriptions to maximise net benefits on a system-wide basis and manage the most efficient transition in the interests of consumers.

The credibility of the ISP in the eyes of stakeholders is risked as the commitments by jurisdictions are taken at face value and not assessed in terms of likelihood, possibility or efficiency by AEMO.

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<sup>3</sup> Energy and climate change ministerial council, 2024, 'Response to the Review of the Integrated System Plan', ii.

Stakeholders to the ISP can only accept the outputs of the ISP on a conditional basis. All other things being equal, this is likely to contribute to lower investment and a slower transition.

The ISP must remain relevant by treating elements it has so far only treated as inputs as outputs. This should include storage, behind the meter generation and storage, demand response, and energy efficiency. Rather than simply take jurisdictional intentions as fixed assumptions, It should provide guidance to jurisdictional planners on the optimal investment mixes from a system-wide perspective.

### **The amendment of the NEO**

The addition of emissions reduction as an objective has significant implications for the ISP which are not yet widely appreciated or reflected in planned reforms to the ISP.

Up until the 2024 ISP, the intent of the planning document has been to describe the least-cost paths for energy infrastructure (mostly transmission) development under a range of scenarios and sensitivities, chief among those variables being the speed at which the wider Australian economy is decarbonised. The implication of this is that if wider decarbonisation occurred more slowly than anticipated, the consumer benefit from investments in new infrastructure in the NEM would be maximised by taking a slower path, and vice versa. We do not consider this appropriate or consistent with the objectives of emissions reduction policy and commitments.

The second reading speeches to the *Statutes Amendment (National Energy Laws) (Emissions Reduction Objectives) Act 2023* (South Australia),<sup>4</sup> reverses this implication and indicates an intent to make the NEM the driver decarbonisation of the wider Australian economy. This means that if the wider economy decarbonises at a slower rate than is anticipated within a given central scenario, the value of more rapid investment in and transformation of the NEM goes up, as it makes wider decarbonisation more rapid and more attractive. The ISP as a whole must evolve to fulfil this ambition as articulated by the legislators enacting it.

We support the intention of ECMC to drive an expansion of the ISP. Their aims for the ISP to coordinate a larger set of actors and orchestrate investment in the demand and supply sides are elements of this needed expansion, but the ambition must be greater to fulfil the needs of the energy sector over the coming decade.

## **3. The requirements of the existing rules**

The existing rules provide adequate scope for AEMO to consider issues relating to gas supply and demand side factors.

National Electricity Rule (NER) 5.22.2 states:

The purpose of the *Integrated System Plan* is to establish a whole of system plan for the efficient development of the *power system* that achieves *power system needs* for

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<sup>4</sup> See 2nd Reading SA House of Assembly 14 June 2023, Hansard pp.4378-4379, 4381-4382; 2nd Reading SA Legislative Council 31 August 2023, Hansard pp.3544-3545.

a planning horizon of at least 20 years to contribute to achieving the *national electricity objective*.<sup>7</sup>

A detailed definition of ‘power system needs’ is provided in Rule 5.22.3.

The ‘power system’ is defined in the Glossary as:

The electricity power system of the national grid including associated generation and transmission and distribution networks for the supply of electricity but excluding regulated SAPS, operated as an integrated arrangement.<sup>8</sup>

The definition of the ‘power system’ is therefore wider than the transmission network and includes associated generation, including gas generators.

Further, Rule 5.22.6 sets out in detail the required content of the ISP. Rule 5.22.6(a)(5), requires that AEMO

For the optimal development pathway, identify the actionable ISP projects, future ISP projects and ISP development opportunities.<sup>9</sup>

Rule 5.10.2 defines an ‘ISP development opportunity’ as -

a development identified in an Integrated System Plan that does not relate to a transmission asset or non-network option and may include **distribution assets, generation, storage projects** or **demand side developments** that are consistent with the efficient development of the power system.<sup>10</sup>

The ISP does not currently fulfil this requirement to identify storage projects and demand side developments, such as demand response options, energy efficiency investments, and electrification. The AEMC should make a preferable rule change to the Better integrating gas proposed rule change explicitly requiring AEMO to consider storage and demand response options that directly compete with peaking gas, and identify optimal development opportunities in these.

As we have noted in our submission to the Draft 2024 ISP, changes are also needed in the Australian Energy Regulator’s (AER) cost-benefit analysis (CBA) guidelines and AEMO’s ISP methodology in order to expand the remit of the ISP in line with existing wording of rule 5.22.6(a)(5).

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<sup>7</sup> Rule 5.22.2, NER.

<sup>8</sup> Glossary, NER.

<sup>9</sup> Rule 5.22.6(a)(5), NER.

<sup>10</sup> Rule 5.10.2, NER.

## 4. Better integrating gas into the ISP

We support the proposal to enhance the consideration of gas in the ISP but consider it unbalanced. An appropriate balance must include alternative options in storage and demand response that also resolve identified firming needs.

We support the limitation placed on gas as an input only – that is, that enhancement of the analysis of gas is done “with the sole aim of optimising electricity infrastructure investments identified in the ODP in the ISP”.<sup>11</sup>

We do not see an appropriate purpose in reproducing the gas development projections which already appear in the GSOO in the ISP. This does not add any value for investors or anyone else.

We support the assessed costs of gas being inclusive of production, transport, pipeline access availability, and storage needs. We would add to this that analysis must therefore be location specific, and that this should be specified in the rule, rather than simply implied.

Work will also be needed to develop a robust framework to guide a ‘like for like’ comparison with alternatives such as storage and demand response. In the past issues like assumptions on the availability of charge, for BESS or hydropower, or availability and willingness to provide demand response have not been resolved definitively, so a process of stakeholder engagement will be needed to determine the appropriate assumptions to make in order to render these technologies comparable.

For the purposes of efficient investment from both the system perspective and the investor perspective, it is important that these assumptions are realistic.

## 5. Improving demand forecasting and demand-side data into the ISP

The JEC supports these measures. However, we note that the proposal is intended only as a stepping stone to the main goal of orchestrating investment in demand side options alongside supply side options, though with a lack of clarity regarding the intended end-point. The main defence of considering demand side factors in the ISP (in 3.1.1 on page 13 of the consultation paper) centres on the value of orchestrating CER and distributed resources. It then explicitly states that the proponent does not propose that the ODP is expanded to include investments in CER, distributed resources, or the distribution network.

We support the proposals to amend this by expanding the DNSP information requirements and the analysis of CER and distributed resources as inputs in the ISP, if only to fulfil the requirements of the ISP as per the current rules. As we have noted in section 3 above, identifying

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<sup>11</sup> AEMC, 20 June, 2024, ‘Enhancing the Integrated System Plan to support the energy transition’, 8.



a plan for the efficient development of the distribution network is already explicitly stipulated as part of the purpose of the ISP, per NER 5.22.2.

It is not currently possible for AEMO to identify an efficient development path for the reasons outlined by the proponent on page 13 of the consultation paper. AEMO lacks granular information on distribution network capacity, and this can increasingly be expected to pose a limit on the effective use of CER resources.

Once again, it is the AER's CBA guidelines and ISP methodology that currently ensure the ISP output remains narrowly focused on transmission, not the rules themselves. These should be amended.

However, it is unclear why, having undertaken this substantial work to enable the first two actions from the ECMC response to the ISP review, the crucial step of optimising the demand side should be pushed back to the 2028 ISP. We agree with the proponent that the value of the exercise lies in this final step and recommend an attempt at optimisation is made in the 2026 ISP. This leaves scope for further action to improve optimisation for the 2028 ISP (rather than commence it). This would be the best use of AEMO's resources, on a cost-benefit basis.

## **6. Better integrating community sentiment into the ISP**

Unlike the other two rule changes, the proposal here is for social licence considerations to impact the output of the ISP in the ODP, not just the inputs.

The JEC supports the intent to improve the cost estimates for transmission and other projects. We agree that a bespoke approach is preferable to a generic assumption for all projects. Simply adding a fixed percentage of forecast costs for a given project as a buffer to cover the costs of social licence acquisition, for example, is not appropriate.

We have observed that the energy sector is increasingly impacted by bad faith engagement and political opportunism which can preference loud and privileged voices, over that of the wider community. The protests against the early proposal for offshore wind in NSW has shown us that opponents are willing to use misinformation and other bad-faith techniques to reap benefit from manufactured conflict. There is a real risk that meaningful measures (and allowed costs) to genuinely consider, incorporate and manage community perspectives result in an unreasonable preference for the perspectives of manufactured or isolated dissent, and that costs to account for this are not controllable.

In order to mitigate this risk, we propose that only 'real' factors are considered in the bespoke analysis of the anticipated cost of acquiring social licence for each given project. This could include things like the number of holdings impacted in the anticipated easement zone, the average lot size, the proportions of private and crown land within the likely route, the number of lots with views impacted, and those impacted during construction, for example. However, the factors must be able to account for those directly and indirectly impacted; for instance, if the directly impacted party is a single large landholder, but the community includes a large number of 'indirectly impacted parties' (those with loss of visual amenity for instance) . These would need to be appropriate for the type of project – the metrics used for an offshore wind generation project would be different from a solar farm or a transmission line, but in each case a set of predefined,

real metrics could be employed. For clarity, 'real' here is meant to be distinct from 'social', as in soundings taken of local sentiment.

## **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](mailto:mlynch@jec.org.au) regarding any further follow up.