

18 July 2024

Anna Collyer
Chair
Australian Energy Market Commission
GPO Box 2603
Sydney NSW 2000

Submitted via: <https://www.aemc.gov.au/contact-us/lodge-submission> (ERC0395)

Dear Ms Collyer,

**AEMC Enhancing the Integrated System Plan to support the energy transition:
Consultation Paper**

Nexa Advisory welcomes the opportunity to provide a submission on the AEMC's *Enhancing the Integrated System Plan to support the energy transition* Consultation Paper (ERC0395). The Consultation Paper combines three rule change requests proposed by the Honourable Chris Bowen MP, Minister for Climate Change and Energy, which seek to:

- better integrate gas market analysis into the ISP;
- improve demand forecasting and the consideration of demand-side factors in the ISP; and
- better integrate community sentiment into the ISP.

The rule change requests follow the review of the Integrated System Plan (ISP) undertaken by the Energy and Climate Change Ministerial Council (ECMC)¹. The recommendations of the review include enhancing the ISP by expanding its consideration of gas market information, consumer energy resources (CER) and other distributed resources, as well as consideration of community sentiment.

Nexa Advisory appreciates the overall sentiment of the rule change requests to increase the robustness of the ISP. However, we believe the rule change requests may do little to accelerate the transition or build the investor certainty required to deliver projects.

As discussed in our recent report², there remain roadblocks to delivering the energy transition in line with this roadmap. While the robustness of the ISP is critical to supporting market confidence, we consider the benefits of the proposed rule changes are marginal when compared with the benefits of removing the roadblocks and uncertainty around delivery. For example, the efforts of the Australian Government and the AEMC should be directed towards enabling better community engagement – rather than mandating how the Australian Energy Market Operator (AEMO) considers this in their modelling.

Additionally, the rule change requests add little value by mandating several elements which are already considered by the Australian Energy Market Operator (AEMO) as part of its statutory functions enabled under the National Electricity Law (NEL)³. We encourage the AEMC to implement the proposed changes in the simplest and most efficient way possible – through

¹ <https://www.energy.gov.au/sites/default/files/2024-04/ecmc-response-to-isp-review.pdf>

² Nexa Advisory, [We Plan and then Don't Build](#), June 2024

³

[https://www.legislation.sa.gov.au/___legislation/lz/c/a/national%20electricity%20\(south%20australia\)%20act%201996/current/1996.44.auth.pdf](https://www.legislation.sa.gov.au/___legislation/lz/c/a/national%20electricity%20(south%20australia)%20act%201996/current/1996.44.auth.pdf)

AEMC Enhancing the Integrated System Plan to support the energy transition Consultation Paper (ERC0395)

amendments of the NER or existing guidelines, so that the market can readily deliver the opportunities outlined by the ISP.

We also encourage the AEMC to consider the robustness of the assumptions around delivery timeframes of the transmission projects identified in the ISP. While we recognise this may be outside of the scope of the current rule change requests, we have recently identified there are significant costs associated with delayed transmission delivery⁴. While it is not the role of the ISP to ensure delivery, there should be greater accountability for State and Federal governments and Transmission Network Service Providers (TNSP) to mitigate the risks to delivery identified by AEMO.

The remainder of our submission outlines our response to each specific rule change request.

Better integrating gas into the ISP

Nexa Advisory believes that the ability to meet our emissions and renewable generation targets is best underpinned by an ISP that focuses on electricity, which considers gas fuel and gas generation only as an augmentation to meet electricity demand and reliability requirements.

In determining the scope of analysis and inputs to the ISP, AEMO should retain a core focus on the electricity sector, reflecting other sectors to the extent they impact the NEM. The focus of the ISP should remain on providing a roadmap for electricity system development, with AEMO managing the scope of inputs, assumptions and complex modelling required.

In line with the current approach around policy assumptions, where there are legislated gas or electrification policies that may result in an increase in electricity demand, AEMO should give regard to these policies.

AEMO already considers the opportunities for the gas sector

The Gas Statement of Opportunities (GSOO) already addresses many of the gas-related points that are proposed to be incorporated into the ISP. It is not immediately clear how mandating the inclusion of this work in the ISP via a rule change provides any benefit to identifying the least cost pathway to a zero-carbon electricity power system.

Additionally, the CSIRO GenCost report⁵ already considers the cost of fuel in its analysis of generation types, which AEMO uses as an input to the ISP. There is likely to be minimal benefit of AEMO duplicating this cost analysis. AEMO also already considers the general national and global economic situation - including fuel availability and pricing - and alternative fuels in their analysis. As such, it is not clear how mandating this work would deliver value to consumers or accelerate the clean energy transition.

AEMO is best placed to manage the complexities of gas in the ISP

Gas fuel prices are set on the international market and can be extremely volatile⁶. It is critical that AEMO manage this uncertainty through its scenario modelling. For example, it is important for the ISP to include sensitivities around gas price fluctuations, given the impacts on investment and dispatch. This ultimately reduces the uncertainty in the ISP.

⁴ Nexa Advisory, [The consumer cost of transmission delays](#), July 2024

⁵ https://www.csiro.au/-/media/Energy/GenCost/GenCost2023-24Final_20240522.pdf

⁶ <https://www.aer.gov.au/system/files/AER%20June%202022%20Market%20Events%20Report-%20FINAL%20VERSION%20-%2014%20December%202022.pdf>

AEMC Enhancing the Integrated System Plan to support the energy transition Consultation Paper (ERC0395)

Additionally, this rule change request may also raise the question of how other fuels are considered in the ISP. For example, if AEMO will be required to develop more detailed projections around the utilisation of gas infrastructure (and the impacts on the electricity system), this could give rise to similar consideration around more detailed analysis of liquid fuels (for example, petrol, as it relates to the electrification of transport). Again, it is not clear what additional value this would create in the ISP. This is why AEMO remains best placed to consider the level of rigour for each area of analysis.

This rule change should enable AEMO to determine the level of rigour for the various inputs, rather than mandate what is included in modelling.

Improving the consideration of demand-side factors in the ISP

We welcome the intent of the rule change to focus on the important contribution the demand-side can make to progressing the clean energy transition and as a source of flexibility to support the changing needs of the clean power system.

Distribution planning should be improved and incorporated into the ISP

There is a significant need for better collaboration between the Distribution Network Service Providers (DNSPs) and AEMO to better reflect the uptake of CER and the role of the distribution network. The ISP already includes projections of CER provided by the Commonwealth Scientific and Industrial Organisation (CSIRO) and Green Energy Markets (GEM), as well as many other sources of CER deployment data. Supplementing this analysis through information and joint planning with distribution networks would add significant value to the ISP.

However, it is not clear that requiring the DNSPs to share data with AEMO will necessarily result in any better characterisation of CER installations. Ensuring the desired outcome of this rule change request would require collaboration between AEMO, DNSPs and TNSPs to ensure an efficient split between the responsibilities of these planner and operator roles.

As identified in the recent Nexa Advisory report on CER⁷, the Distribution Annual Planning Report (DAPR) is no longer fit-for-purpose. There is a significant need for better visibility of distribution network information – including around capacity, utilisation and constraints. As such, any rule change related to distribution network information should focus on improving the joint planning between the DAPR process and ISP development. This must require that distribution network data is publicly available (not just shared with AEMO and other agencies).

We consider integrating the planning – including the sharing of relevant data - between DNSPs and AEMO to address these issues is the most efficient method to better enable the inclusion of CER and demand-side factors in the ISP. As such, there is a key role for the Australian Energy Regulator (AER) to facilitate the sharing of key distribution network data – given their role in setting the DAPR process (for example, through the DAPR template⁸). It would not be efficient to mandate AEMO to undertake this work.

Once this data is available, there is a clear opportunity to improve the existing inputs to the ISP. To achieve the intention of this rule change request, AEMO should facilitate collaboration between DNSP and its CER input providers to ‘back-cast’ historic predictions of CER deployment by using DNSP data on actual installations. Additionally, AEMO’s current providers

⁷ https://nexaadvisory.com.au/web/wp-content/uploads/2024/05/Nexa-Advisory-_Accelerating-CER-in-Australia.pdf

⁸ <https://www.aer.gov.au/industry/registers/resources/guidelines/distribution-annual-planning-report-template>
AEMC Enhancing the Integrated System Plan to support the energy transition Consultation Paper (ERC0395)

need to explore distribution-connected utility-scale renewable generation and storage. These actions are low-cost ways of adding value through the additional information collected from distribution networks.

AEMO and government must reconsider the broader role of CER

While DNSPs and the AER have a clear role in facilitating better visibility and information around CER and demand-side factors, AEMO and government have a clear role to better facilitate the opportunities that are currently untapped.

Nexa Advisory is concerned that AEMO continues to pursue the notion that significant CER capacity can be leveraged by the system to support secure operation. This must be contextualised with the consumer realities outlined in many studies – which highlight there is a lack of trust in the energy sector⁹, and that customers with CER are very reluctant to countenance ‘orchestration’^{10,11}.

For example, the analysis showing the cost of limited orchestration in the 2024 ISP does not resolve the fundamental tension between AEMO aspirations and consumer reality. However, it is not the role of AEMO to facilitate social acceptance of orchestration; the ISP should provide a signal to Federal and State Governments to implement broader CER policy and support orchestration. This requires broader work to ensure flexibility, incentive schemes and tariff structures are implemented to support this uptake.

This can also be achieved through facilitating Commercial and Industry (C&I) CER and supporting the existing demand-side mechanisms, such as the Wholesale Demand Response Mechanism (WDRM), that can provide aggregated, scale-efficient solutions and the benefits of ‘orchestration’ while overcoming social reluctance around centralised control of these assets.

As such, Nexa Advisory asks that the review of the WDRM that is scheduled for 2025¹² be brought forward to better facilitate the participation of demand response in the market. Flexibility is urgently needed now, and the NEM cannot wait for a review in 2025 - and any subsequent rule changes. We have also outlined the opportunity of C&I CER and the role for Federal and State government in our previous work¹³.

With better consideration of demand-side factors and CER in the ISP, we consider AEMO would provide a clear signal of the benefit of such measures, enabling government to implement such policies to support the continued investment and deployment of these solutions.

Better integrating community sentiment into the ISP

Nexa Advisory recently identified that the absence of community acceptance for new transmission infrastructure remains a key blocker to timely delivery of new transmission lines¹⁴.

⁹ <https://www.edelman.com.au/trust/2024/trust-barometer#download>

¹⁰ <https://aemo.com.au/-/media/files/initiatives/der/2022/community-perceptions-of-der-and-aggregation-services.pdf?la=en>

¹¹ https://energyconsumersaustralia.com.au/wp-content/uploads/insight_behave_23_3.png

¹² <https://www.aemc.gov.au/news-centre/media-releases/aemcs-review-wholesale-demand-response-mechanism>

¹³ <https://nexaadvisory.com.au/web/wp-content/uploads/2024/02/Nexa-Advisory-Report-Accelerating-CI-demand-response-in-NSW.pdf>

¹⁴ https://nexaadvisory.com.au/web/wp-content/uploads/2024/06/Nexa-Advisory-Report_We-Plan-and-then-Dont-Build.pdf

AEMC Enhancing the Integrated System Plan to support the energy transition Consultation Paper (ERC0395)

While incorporating community sentiment into the ISP would provide more accurate information on likely delivery dates of key transmission projects, it would not resolve the underlying lack of social licence for new transmission lines. It is not the role of AEMO to either manage community sentiment, nor signal for its need; Federal, State and Local governments, and TNSPs should be actively working through community engagement.

We consider this rule change request adds little value to the process. In line with the above discussion around gas, AEMO is best placed to determine how to consider community sentiment within ISP modelling – which it has already undertaken through sensitivity modelling. As such, it is not clear how mandating this provides any additional value.

This can be contrasted with the significant value that would be unlocked by facilitating community sentiment and supporting the efficient delivery of the ISP's ODP.

As such, the AEMC should consider how any changes resulting from this rule change request can signal for this work to be done. For example, the ISP should provide a clear signal for government and TNSPs to undertake community engagement. This may result in improved accountability and decreased uncertainty around the delivery of key ISP projects.

We urgently require improved community engagement – rather than mandated modelling
Joint planning provides some value for the consideration of community sentiment in the ISP. TNSPs are already engaging with the communities that are likely to host new transmission lines, so should be required to share community sentiment information with AEMO as part of the current routine joint planning efforts for the ISP. This ensures efficiency in developing these considerations in the ISP without incurring additional cost.

Further efforts are needed by TNSPs (AEMO and their subsidiaries in Victoria), Federal and State governments to genuinely understand host community expectations around the benefits they receive for hosting new infrastructure and develop innovative and transformative benefit schemes that leave a lasting positive legacy for host communities.

Federal and State policies should also recognise the synergies between transmission network developments and the need for distribution network upgrades in host communities to support regional electrification and the improvements in reliability that will drive regional economic growth.

Federal, State and Local governments are best placed to deliver this work and should inform AEMO on the outcomes to ensure this is reflected with clarity in the ISP.

Thank you for the opportunity to provide input on these rule change requests. We welcome the opportunity to further discuss any aspect of our submission - please contact either myself or Jordan Ferrari, Director - Policy and Analysis, jordanferrari@nexaadvisory.com.au.

Yours Sincerely

Stephanie Bashir
CEO and Principal
Nexa Advisory