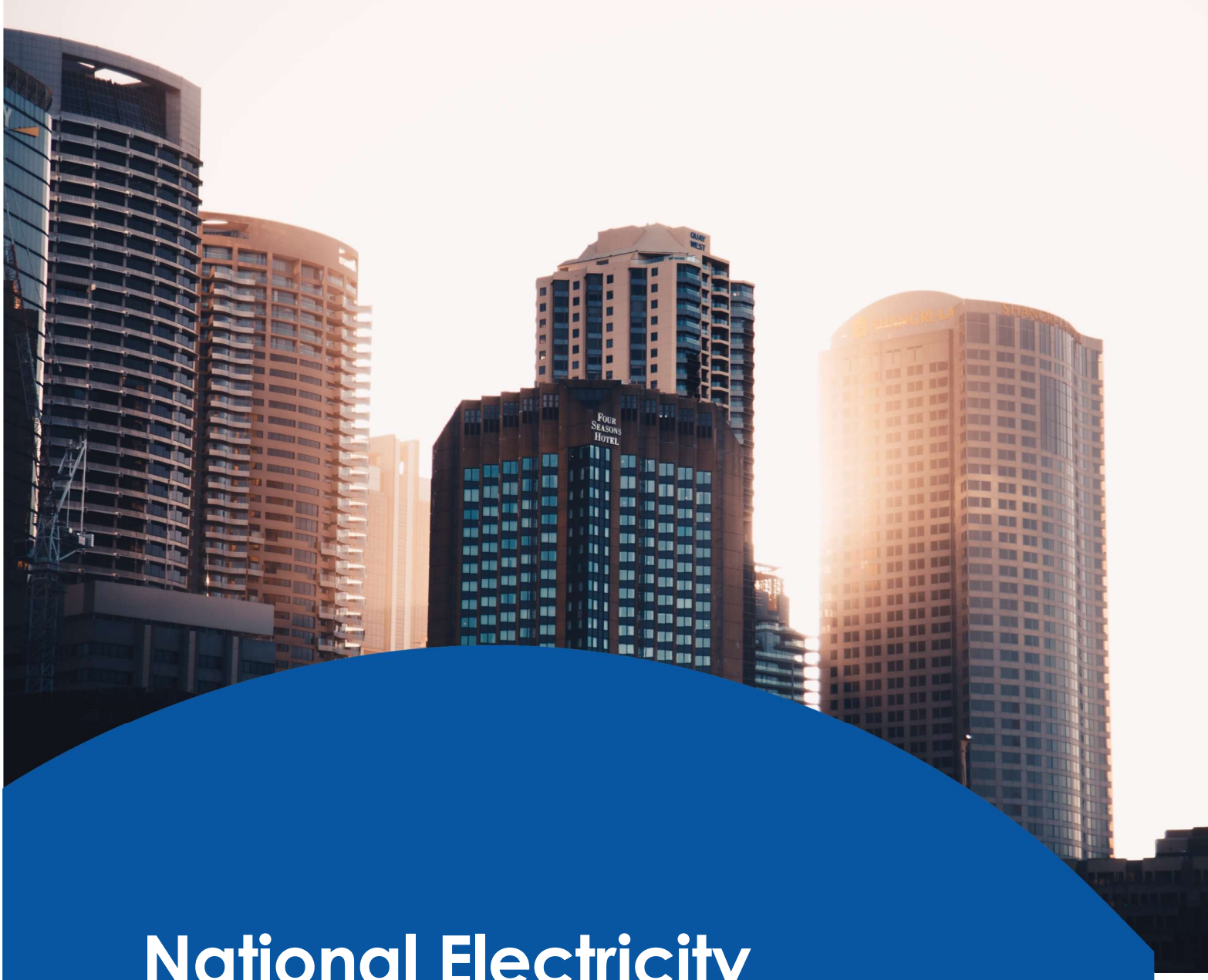

National Electricity Amendment (Integrated Distribution System Planning) Rule 2026

Consultation

eec

About the EEC

The EEC is the peak body for Australia's energy management sector.

We are a membership association for businesses, universities, governments and NGOs that have come together to ensure Australia harnesses the power of efficiency, electrification and demand management to deliver a prosperous, equitable, net zero Australia with:

- People living and working in healthy, comfortable buildings;
- Businesses thriving in a decarbonised global economy; and
- An energy system delivering affordable, reliable energy to everyone.

The EEC works on behalf of its members to drive world-leading government policy, support businesses to rapidly decarbonise, and to ensure we have the skilled professionals to drive Australia's energy transformation.

Introduction

The importance of the demand side in whole of system planning

A rapid energy transition requires creating effective links between sources of low emissions energy supply and energy demand. Linking between these elements of the energy system requires visibility of both the supply-side and demand-side of the energy system.

Unlocking the demand side is essential for managing Australia's future electricity system as it transitions to high levels of variable renewable energy. Demand-side resources—including energy efficiency, demand response and distributed energy resources (DER) such as rooftop solar, batteries and electric vehicles—can deliver significant system value by improving reliability, reducing costs and enhancing competition.

Unlike supply-side infrastructure, most of the demand-side resources are connected to the low-voltage (LV) distribution network. As such, distribution network service providers (DNSPs) are in a unique position to support demand-side investments because of their access to data and understanding of when, where, and what types of demand-side resources would provide system benefits.

Integrated System Planning

The ISP is an influential document that guides decision-making by energy-sector investors and policymakers. Without proper consideration of the demand-side, the ISP risks presenting a set of possible scenarios that do not represent the most realistic least-cost pathway for developing the National Electricity Market.

While the proposed rule is a positive step in the right direction, reform of the ISP itself is critical. The EEC has also previously advocated for AEMO to develop a Demand-Side Statement of Opportunities (DSOO) and will continue to do so.

Governance reform

The EEC and a number of other organisations are actively exploring the role of governance reform in supporting Australia's energy transition. Most recently, the EEC, along with RACE for 2030, has released a green paper, *NEM Governance Reform, Options for the future electricity system*, which discusses gaps in the current governance of the NEM – particularly on data collection, analysis and strategic advice – and will inform a white paper over the coming months.

On the demand side specifically, the EEC, ACOSS, Property Council and Ai Group have argued that charging an organisation to lead on demand management policy and delivery, including issues like appliance standards and building ratings, could streamline arrangements and through scale enable the development of deeper expertise on demand-side policy. Should this body be created, it could also have an important role in implementation of the IDSP, such as developing standardised guidelines and templates and monitoring network progress against their Network Data and Insights Roadmaps.

The potential role of a Distribution System Operator is also currently being consulted on as one of the key reform priorities being progressed by the CER Taskforce (DSO Workstream), along with a

consultation on data sharing arrangements to inform planning and enable future markets (Data Sharing Arrangements Workstream).

In short, the governance arrangements of the demand side are a topic of significant importance. While this rule change should support more transparency around data and planning at the distribution level, broader governance reform is required to leverage that data effectively.

To realise full benefits the DNSP planning process and associated data sets should feed into all future planning and co-optimisation

There is an opportunity to replace the current DAPR process with a data driven process which leads to a two-yearly IDSP and associated data sets, including planning and data sets at the LV level. Data sets could be provided on a more regular basis, with the goal of providing live data in the future.

The EEC supports planning documents and data sets which are enabled by standardised methodology across DNSPs. It is noted that some DNSPs may have limitations on current LV data due to varying levels of smart meter roll out, but this should be noted as such, and actions to remove limitations over time should be taken.

Data provided under the updated process could feed into multiple processes (alongside the IDSPs), including:

- AEMO's ISP – including data required for the demand-side factors statements in future ISPs;
- data required from DNSPs once the National CER Roadmap consultation is completed;
- a future DSOO;
- the Regulatory Information Order process; and
- data required following the AER's Phase 3 low-voltage network visibility report.

To provide full benefit to the primary audiences (key stakeholders including retailers, demand side service providers, consumers) DNSP planning documents and data sets should be consistent across DNSPs.

All DNSPs will be putting in systems to improve data analytics as smart meters are rolled out over the next five years. This data can be harnessed and delivered to the market in a way that is clear, up-date, and comparable across all DNSPs.

The IDSP planning process and associated data sets could be co-designed between DNSPs, AEMO, the AER and industry participants (such as retailers and consumer groups) to ensure that the data provided is delivering value for stakeholders.

Question 1: What are the shortcomings of the current distribution annual planning process?

The EEC agrees that there are shortcomings with the current distribution annual planning process.

The Distribution Annual Planning Report (DAPR) produced by each DNSP does not provide information with enough granularity to deliver benefits to interested stakeholders.

Most DAPRs detail network planning matters at the high voltage supply level which is of limited value to interested stakeholders such as VPP operators, and demand response providers. It is also a static document, and no corresponding data sets are provided.

The EEC agrees with the proposals put forward by the ECA that:

- DNSPs could make more effective use of their existing data when conducting their annual planning review.
  - The EEC notes that DNSPs have varying levels of availability at the LV level at this point in time. However, as more data becomes available, DNSPs should be using this data effectively and transparently to plan networks in the most cost-effective way.
- There is a lack of consistency between DNSPs data formats and modelling methodologies.
  - This is a key issue for interested stakeholders. The EEC supports standardisation of data formats and methodologies across all DNSPs.
- DNSPs lack data strategies to improve data capture and data sufficiency over time.
  - The EEC notes that DNSPs are likely to have strategies in place to improve data capture over time, but that these strategies are not shared, or monitored to ensure improvements are made. The EEC supports the roadmap approach set out by ECA to ensure that DNSPs are actively improving data capture and use over time.
- DNSP modelling and planning is insufficiently frequent, granular, and comprehensive to account for quickly changing network and CER hosting capacity.
  - This is a critical issue for interested stakeholders. Planning and forecasting should include the low voltage supply level to provide maximum benefit to the primary audiences of the planning documents, and ultimately for consumers.
- DNSPs could be more transparently sharing information about network and CER hosting capacity and constraints.
  - This is key for stakeholders and consumers. Hosting capacity should be freely available at the low voltage level. Some DNSPs are already providing capacity maps, but this approach should be standardised and made consistent across all DNSPs.
- The existing distribution annual planning process is incentivising lower utilisation of network infrastructure?
  - Please see the answer to question 10.
- There is a lack of consistent, standard and systematic engagement with communities and other stakeholders during the annual planning review?
  - Please see the answer to question 6.

Question 2: Does distribution network planning need to be further integrated with the ISP?

Distribution network planning and the ISP should be fully integrated to ensure that the supply and demand side can be co-optimised across the whole electricity system. There are currently shortcomings across both processes and the outputs that they deliver.

Integrated System Planning

The ISP currently does not yet adequately incorporate the demand side, despite genuine and ongoing efforts on this front.

AEMO uses limited data provided by the DNSPs (including data provided through DAPRs) as one of the inputs into the ISP.

The ISP currently does not include investments in CER, distributed resources or the distribution network in the optimal development path alongside investments in supply-side infrastructure. This limits the way AEMO conducts energy system planning and continues a long-term shortcoming of the ISP.

Requiring AEMO to consider investments in both supply- and demand-side resources equally in its modelling would 'level the playing field' between the supply and demand side in the ISP, which has hitherto helped to drive investment in generation and transmission infrastructure while failing to highlight the importance of investments in behind-the-meter resources. Energy efficiency, flexible demand and other behind-the-meter resources are likely to deliver energy services at much lower cost than the supply-side of the energy system.

DAPR

As most DAPRs focus on high voltage and medium voltage parts of the distribution network, limited granular LV data is provided through this process. As more CER is added to the network, LV data will become increasingly important.

In the absence of an ISP which adequately addresses the demand side, the IDSP provides an opportunity to more accurately incorporate demand side opportunities into distribution network planning and for more granular data to be provided to AEMO as part of the ISP process.

Question 3: How can distribution network transparency be improved, including during network planning?

The EEC agrees that there is a lack of transparency of distribution networks and the distribution annual planning process and that improving visibility would assist third parties.

The EEC agrees with the ECA that improving the planning process and availability of granular data will increase transparency.

Question 4: Is a new distribution planning process required?

The EEC suggests that the current distribution planning process should be updated to reflect the growing role that DNSPs play in a two-way power system. More granular information is required along with accompanying data sets. This could be provided under the proposed IDSP process.

As set out above, a data driven planning process could feed into multiple planning and co-optimisations processes bringing benefits to multiple stakeholders.

The EEC recommends that while the IDSP could be provided every two years, some data sets would need to be updated more regularly.

The practicality of running a two-year planning cycle alongside a the 5-year determination cycle needs to be considered.

Question 5: How useful is the proposed data for the IDSP process?

The EEC agrees that the data proposed by the ECA would be useful for the IDSP process.

Question 6: Is a new consultation process needed for the distribution annual planning review?

The EEC understands that consultation currently carried out by DNSPs can be limited to the 5-year determination consultation process.

The EEC agrees that DNSPs should carry out formal consultation as part of the IDSP development, but that informal Working Groups could also be set up with interested stakeholders (such as consumers and key industry participants) to understand how the IDSP process and related data sets are being used.

Question 7: Is a Network Data and Insights Roadmap the right tool for implementing the proposed IDSP process?

The EEC agrees that the Network Data and Insights Roadmap (Roadmap) would support DNSPs to transition to the proposed IDSP process.

The Roadmap approach recognises that DNSPs have varying levels of LV data at this point in time and allows the DNSPs to set out where limitations exist and how they will be addressed.

Question 8: Are new guidelines and templates required to standardise the IDSP framework?

Yes, guidelines and templates are needed to ensure consistency across DNSPs.

Question 9: Are the proposed benchmarking requirements suitable?

The EEC supports the ECA's proposal that the AER should regularly publish benchmarking reports to increase transparency and enable better oversight of DNSP expenditure.

In relation to publishing reports that compare and contrast planning methodologies across DNSPs, relevant guidance should standardise planning methodologies across DNSPs, making them directly comparable.

Question 10: Are the existing performance metrics for distribution networks no longer useful with the increasing adoption of CER?

The EEC agrees that the existing performance metrics for DNSPs are no longer appropriate. New metrics should encourage all DNSPs to achieve greater productivity, efficiency, utilisation and flexibility.

Some DNSPs are already evolving their operations to provide an increasingly diverse set of service outputs and value for customers (emissions reduction, resilience, DER integration, system security, etc). Given this, it would be timely to review whether these outputs are being effectively aligned to distributor's reward and incentive structures (investment funding, incentive schemes, benchmarking), or if there are alternative models that can achieve a better alignment.

As set out by the ECA, researchers at the Institute for Sustainable Futures at UTS[1] have proposed two alternative headline metrics to traditional network utilisation which should be further explored:

- Total Energy Throughput Utilisation (TETU) focussed on maximising the customer value that is facilitated by a grid connection, in the form of energy imported from the grid, exported to the grid and self-consumed.
- Two-way Power Flow Utilisation focussed on understanding and balancing the level of capacity risk accrued to deliver the network productivity represented in the TETU. This provides visibility of the time-of-day and seasonal variations in two-way grid usage that inform how TETU can be maximised.

Question 11: How frequently and in what form should the proposed IDSP and supporting data be released?

The IDSP and associated data sets, including planning and data sets at the LV level should be released every two years. Some key data sets should be provided on a more regular basis, with the goal of providing live data in the future.

Question 12: How should any data privacy concerns be managed?

Privacy concerns can be managed and should not be an obstructing factor to sharing data which has been appropriately aggregated.

This could be at the LV transformer level where customer numbers are sufficient, noting that the number of customers per LV transformer will differ between regions.

Question 13: What are your views of the benefits and costs of the proposed solution?

The EEC has been told that the costs of implementing changes proposed by the rule change will not be immaterial for DNSPs.

[1] Langham, E, Ibrahim, I., Rispler, J and Roche, D. (2024). Reimagining Network Utilisation in the Era of Consumer Energy Resources. Prepared by UTS with the support of Energy Consumers Australia. Version 1.1, Nov 2024.

However, if the proposed planning process and increased transparency of data can be used for multiple purposes by multiple stakeholders, it can deliver the benefits of better planning across the system which in turn will deliver significant benefits to consumers.

Question 14: Assessment framework

The EEC suggests that the 'Principles of market efficiency' principle could be expanded to include improving whole of system planning through the ISP.

Energy Efficiency Council

Level 18, 1 Nicholson Street,
East Melbourne 3002
Victoria, Australia

eec.org.au