

Australian Energy Market Operator

Submission made via email to ISP@aemo.com.au

22 November 2024

Subject: 2026 ISP Methodology Consultation

SA Power Networks welcomes the opportunity to provide input on AEMO's proposed changes to the methodology used for the 2026 ISP. The ISP serves as the "compass" for the energy transition, guiding our own network planning in addition to investments across the wider energy system. We consider that an accurate, robust and optimised methodology for producing the ISP is critical to ensuring that the energy transition can be delivered at the lowest whole-of-system cost for all consumers.

Our response focuses on AEMO's proposed treatment of distribution network capabilities and their impact on CER within the ISP model. SA Power Networks has been engaging closely with AEMO via the DNSP ISP Working Group, as well as via the parallel *Improving consideration of demand-side factors in the ISP* rule change. We consider that the proposed methodology to consider distribution network capabilities in the ISP will lead to a more robust ODP and lays the foundation for wider reforms to deliver cost-reductions to all consumers.

Data provided by DNSPs for use in the ISP model

AEMO proposes that key inputs from DNSPs to the ISP model would be:

1. the current capabilities of distribution networks to host CER; and
2. the potential to augment the network to host additional CER, including the cost of that augmentation and the incremental hosting capacity unlocked.

We support the provision of these inputs and recommend that (1) be provided by DNSPs for consideration within the ISP model in the form of a MW value of *peak coincident curtailment* annually, aggregated to the transmission node identifier (TNI), derived from models that consider timeseries behaviour at the LV transformer level.

Provision of peak coincident curtailment data aggregated to the TNI level will ensure that DNSPs are able to adequately consider in their modelling the complexities of:

- asset ratings;
- voltage compliance;
- spatial CER uptake;
- CER behaviour, including:
 - EV charge and discharge profiles;
 - battery charge and discharge profiles, including VPP participation;
 - response to time-of-use tariffs and other pricing signals.

DNSPs will be able to model these factors at a granular level, determining the point at which network hosting capacity is breached and the resultant curtailment on a timeseries basis, with the peak coincident curtailment aggregated to the TNI then being provided to AEMO as input to the ISP model. This figure would represent the generation capacity that is unable to be hosted on the current distribution network. Importantly, this generation could still be installed and fully service behind-the-meter loads but would be unable to be exported past the TNI, having been constrained at some lower level in the distribution network.

In addition to this constraint data, we propose that DNSPs provide data relating to:

- constrained energy, namely the *total volume of constrained energy* per TNI annually, aggregated from timeseries models at the LV transformer level; and
- the costs to remediate identified constraints, in the form of a *\$/MW constraint remediation cost* per TNI annually, noting that these are based on bespoke remediations at the LV level of the network.

We consider that these datasets will provide a more accurate view of actual distribution network constraints impacting the ability of CER to support the wider power system, as opposed to the provision of asset ratings (import/export limits) only. We understand, however, that whilst this data represents the *optimal* way to consider distribution constraints in the ISP, and could be provided by SA Power Networks today, it would likely require some level of modelling uplift for some other DNSPs, which may not be achievable within the timeframes of the 2026 ISP development. We encourage AEMO to continue leveraging the DNSP ISP Working Group to determine the requirements for a staged uplift of the ISP model.

Co-optimisation of distribution & transmission

We strongly support the improved consideration of distribution network capabilities and CER within the ISP and consider that it has the potential to realise significant benefits to customers through a lower “whole-of-system” cost pathway to the energy transition.

The two key areas of reform that will enable this path are:

1. considering the current constraints present on the distribution network within the ISP, and considering investments to remove these constraints; and
2. considering investments in increased levels of distributed generation and the associated distribution network capacity to host that generation, as a viable alternative to investments in large-scale generation and associated transmission capacity within the ISP.

Whilst the proposed ISP methodology addresses (1), it does not allow for the co-optimisation outlined in (2), which is where most of the benefits will be realised.

We believe that providing equal consideration to distributed generation and distribution network capacity along with utility-scale generation and transmission network capacity within the ISP is in the long-term interest of customers. This should be achieved by including actionable investments in distributed generation and distribution network capacity at the TNI within the ODP, leaving DNSPs to determine how to best optimise those investments across lower levels of their network.

Achieving this co-optimisation could realise up to \$7B of annual customer benefits by 2030, as outlined in *The time is now: Getting smarter with the grid* report published by Energy Networks Australia and LEK Consulting.¹ We recognise that doing so, however, may require additional reforms over a longer period than the 2026 ISP development allows for, and hence we would support AEMO’s approach to first consider existing constraints, but strongly recommend that consideration be given to further reforms prior to the 2028 ISP.

We look forward to continuing to engage constructively with AEMO on the progressive development of the 2026 ISP. Should you have questions on any aspect of our submission, please contact Liam Mallamo, Future Networks Engineer, at liam.mallamo@sapowernetworks.com.au.



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¹ <https://www.energynetworks.com.au/assets/uploads/The-Time-is-Now-Report-ENA-LEK-August-2024.pdf>