

13 February 2026

Australian Energy Market Operator  
Via online Portal

24-28 Campbell St  
Sydney NSW 2000  
All mail to  
GPO Box 4009  
Sydney NSW 2001  
T 13 13 65  
ausgrid.com.au

## **Ausgrid response to Draft Integrated System Plan 2026 consultation**

Ausgrid is pleased to provide this submission to the Australian Energy Market Operator (**AEMO**) in response to the Draft Integrated System Plan (**ISP**) 2026. Ausgrid operates a shared electricity network that powers the homes and businesses of more than 4 million Australians living and working in an area that covers over 22,000 square kilometres from the Sydney CBD to the Upper Hunter.

Ausgrid recognises the efforts that have gone into expanding the coverage of distribution network opportunities in this ISP cycle. Some of Australia's best opportunities for addressing the increasing and interconnected challenges of the energy transition lie in harnessing the potential of the 'middle-part' of the grid - sub-transmission lines, local substations and the lower-voltage distribution network. In particular:

- At the low voltage level, the rapid uptake of Consumer Energy Resources (**CER**) provides opportunities to lower system costs for all electricity customers, not just those that can afford CER. However, despite improvements in this ISP cycle, more work remains to improve CER forecasting and understanding customer behaviour in the ISP. CER coordination can also play a vital role in containing energy system costs, but market structures currently do too little to incentivise the coordination of CER, in a way that benefits the broader system.
- In the sub-transmission network, there is latent capacity that can be leveraged to support a lower-cost, more efficient transition, which also has a lower community impact. However, existing strategic planning processes (both in the ISP and within jurisdictions) overlooks the role of the sub-transmission network, missing opportunities to rapidly unlock utility-scale generation and Battery Energy Storage Systems (**BESS**).
- At the transmission-level, delays, cost and social licence challenges have the potential to put at risk the ability to deliver sufficient replacement capacity prior to the closure of coal-fired generators.

These challenges underscore the need to better integrate distribution networks (both the sub-transmission network, and medium and low-voltage distribution network) into system-wide planning. There is also a need for regulatory frameworks to improve the enablement of anticipatory distribution-level investments and better recognise their critical role in supporting customers through the energy transition.

However, despite the work of DNSPs and AEMO to incorporate distribution network capabilities into ISP analysis, the ISP's coverage of distribution networks remains very light on detail. Only three DNSPs, including Ausgrid, supplied tailored cost and opportunity information, meaning analysis of most DNSPs' capabilities remains generic. The 2028 ISP should build on the foundational work from this ISP, to ensure that DNSP data is more deeply embedded in analysis and distributed opportunities are presented more comprehensively. This will require improvements to the data gathering process to ensure that all distribution networks are able to supply consistent information in time to inform the analysis. Ausgrid is also engaging in the Australian Energy Market Commission's (**AEMC's**) Review of the ISP Framework and intends to provide proposals for improving AEMO's information gathering process in future ISP cycles.

The first part of this submission will address the representation of distribution network opportunities in the Draft ISP. The second part will provide Ausgrid's views on other issues in the Draft ISP. Ausgrid will also

make a separate submission to AEMO to provide updated information about potential future stages of the Hunter-Central Coast Renewable Energy Zone.

Also attached to this submission is the NSW Distribution System Plan Opportunities Report (**NSW DSP**). The three NSW DNSPs, Ausgrid, Endeavour Energy and Essential Energy, jointly produced the NSW DSP, which complements AEMO's efforts in the ISP to integrate sub-transmission and medium and low-voltage distribution network with bottom-up demand forecasting and a more detailed representation of the distribution networks in NSW. The DSP identifies clear value from doing more at the distribution level, under all future demand scenarios, to deliver cost savings for households and businesses, help de-risk the energy transition and improve customer participation in the energy system.

We welcome further collaboration with AEMO on the ISP. Please contact Simon Moore, Senior Policy Advisor at [simon.moore@ausgrid.com.au](mailto:simon.moore@ausgrid.com.au) should you wish to discuss further.

Regards,



Timothy Jarratt  
Group Executive, External Affairs & Strategy

## Appendix A

### Representation of distribution network opportunities

The ISP not only determines the Optimal Development Pathway (**ODP**) for the electricity system; it also guides industry, Government and public understanding of Australia's energy future. By both under-representing distribution network capabilities in quantitative modelling, and under-reporting them in the ISP's narrative, AEMO risks a less efficient ODP and higher costs for energy consumers.

Ausgrid considers there would be merit in including more of the analysis and conclusions found in Appendix 9 (Section 9.2) in the main ISP report's Section 9.2.<sup>1</sup> This would improve the visibility of analysis carried out by AEMO and ensure that conclusions regarding distribution network capability are found by industry and stakeholders. In particular, Appendix 9 makes the following findings which are omitted or only partially reported in the main report:

- **Utilising existing network capacity is more efficient:** The ISP reports on investments that could be made to unlock network capacity. However, it buries in an Appendix the key point that distribution network capacity is available today, and if utilised would result in a more efficient system, lowering costs to consumers. Increased visibility and focus on available distribution network capacity in the ISP would also signal to industry stakeholders that distribution-connected opportunities exist and are a viable alternative pathway to transmission connection for storage and generation projects.

Table 11 of the main report<sup>2</sup> shows only the additional network capacity unlocked through investments in voltage management schemes. This presents only a partial picture of the overall distribution network opportunities, as presented in Tables 3 and 6 of Appendix A9.<sup>3</sup> In particular, it means that the main report omits the key point, that there is a tranche of distribution network capacity available to use immediately, and at near zero cost, as represented in Table 3 of Appendix A9 in the "Use existing network" column. Bringing the full table into the main report and making corresponding updates to the narrative in Section 9.2, would strengthen the ISP's coverage of distribution systems.

- **Distribution opportunities are not just rooftop solar:** The narrative around "Opportunities for the development of the distribution network" focuses predominantly on reducing curtailment of rooftop solar to increase CER generation export capability.<sup>4</sup> There is minimal attention given to other demand side factors, including the connection of generation in the high-voltage and sub-transmission parts of the distribution network. A more rounded depiction of the opportunities that exist on the distribution network will lead to both a more accurate demand forecast, and allow the ISP and other subsequent projects such as AEMO's Demand Side Statement of Opportunities to

---

<sup>1</sup> AEMO; Draft 2026 Integrated System Plan; [https://www.aemo.com.au/-/media/files/major-publications/isp/draft-2026/draft-2026-integrated-system-plan.pdf?rev=01e6116c8dbd473a954928253886791c&sc\\_lang=en](https://www.aemo.com.au/-/media/files/major-publications/isp/draft-2026/draft-2026-integrated-system-plan.pdf?rev=01e6116c8dbd473a954928253886791c&sc_lang=en) and AEMO; Draft 2026 Integrated System Plan Appendix A9 Demand Side Factors; [https://www.aemo.com.au/-/media/files/major-publications/isp/draft-2026/a9-demand-side-factors-statement.pdf?rev=9a7f1996ddf841009f1311530215a6a8&sc\\_lang=en](https://www.aemo.com.au/-/media/files/major-publications/isp/draft-2026/a9-demand-side-factors-statement.pdf?rev=9a7f1996ddf841009f1311530215a6a8&sc_lang=en)

<sup>2</sup> Draft 2026 ISP; p. 86

<sup>3</sup> Draft 2026 Integrated System Plan Appendix A9 Demand Side Factors; p. 17 and 26

<sup>4</sup> Appendix A9, Section 9.2

identify and prioritise the most cost-effective opportunities among the many distribution and demand-side options.

Likewise, there is scope for deeper discussion in Appendix A9, Section 9.2, of the impacts of other forms of demand side flexibility such as hot water systems, EVs and distributed storage on distribution network level opportunities and investments, rather than just presenting them in terms of their impacts on demand from bulk or CER generation.

- **Analysis has been limited by data constraints:** AEMO's ability to assess distribution network opportunities appears to have been limited by the lack of consistent data from DNSPs. AEMO will need to improve processes for collecting information from DNSPs to ensure it is able to produce a report which reflects all DNSPs' capabilities, and which reduces the need for it to resort to default estimates of DNSP costs and opportunities.

Table 3 in Appendix A9 identifies the costs of distribution network developments for each DNSP. It is notable that the three DNSPs who have provided tailored cost estimates (Ausgrid, Ausnet and SAPN) have significantly lower costs than the default figures applied to all other distribution networks. For example, the table shows a default estimate of \$400k/MW to alleviate voltage constraints for distribution networks without specific information, compared with a range of \$90-275k/MW from those distribution networks that did provide information.

Additionally, the 'alleviate voltage constraints' heading is misleading as this represents distribution network augmentation to enable much large quantum of CER, rather than alleviating voltage constraints as Ausgrid has included in correspondence with AEMO.

This part of the Appendix would benefit from additional explanation of the default assumptions. AEMO should provide in the ISP information that was previously presented in the Electricity Network Options Report, which laid out the rationale behind the default values used.<sup>5</sup> Ausgrid has previously provided AEMO with feedback on the unsuitability of reliance on long-run marginal cost (**LRMC**) to derive CER enablement costs. LRMC overemphasises augmentation costs and underemphasises replacement expenditure impacts, which better reflect the costs of CER enablement. Future ISP cycles should adopt a more sophisticated approach to CER enablement cost assessment, in line with feedback previously provided to AEMO's ISP Forecasting Working Group.

### Further observations on the Draft ISP 2026

The energy transition and policy landscape move rapidly. A number of key changes have occurred since the Draft ISP was developed. These areas require updates to the ISP as it is finalised to reflect current or anticipated circumstances:

- **Cheaper Home Batteries Program:** Changes to the Commonwealth's Cheaper Home Batteries Program (**CHBP**), announced in December 2025 and expected to take effect in May 2026, should be

---

<sup>5</sup> AEMO; Electricity Network Options Report 2025; p. 190

reflected in updated calculations in the Final ISP.<sup>6</sup> Ausgrid supports inclusion of an Alternative Step Change scenario reflecting changes to battery subsidy policy in the final report.<sup>78</sup>

Home battery installations under the CHBP in 2025 alone accounted for more than half of the allowance made in AEMO's Inputs, Assumptions and Scenarios Report (**IASR**) for installations over the 2025 to 2030 period in the Slower Growth Scenario in the Draft ISP. The final IASR forecasts included 250,000 home battery installations between 2025 and 2030 in the Slower Growth Scenario, however 160,000 installations were completed under the Commonwealth's CHBP by December 2025.<sup>910</sup> The upper and lower bounds for home battery deployment set in the scenarios should be reviewed to determine whether they still reflect plausible future outcomes.

The sustained strength of battery sales following the creation of the CHBP provides strong evidence that the underlying sector capacity to deploy household batteries has changed. This should inform a new assessment of the likely future deployment rate beyond the CHBP, rather than assuming the CHBP to have a transitory effect on battery deployments over time. The CHBP program is the point of inflection between the prior historical trend and the new run rate. This will impact on demand forecasts, network utilisation, and the value of CER coordination beyond the end of the CHBP.

However, despite the high uptake of home battery installations under the CHBP, a significant equity gap for consumers remains. Strata and rental properties — a huge portion of our customer base in Sydney — cannot access the CHBP easily. Ausgrid suggests that future AEMO forecasts and ISP modelling explicitly segment "Community/Neighborhood Storage" from "Residential BTM." Separating out community and residential storage forecasts and modelling will help distribution networks and the broader industry to better understand the potential benefits of mid-scale storage for network support and opportunities to better target CER to ensure more customers have access to locally generated solar and storage. Ausgrid has provided further information on this issue in its response to AEMO's Forecasting Assumptions Update.

- **Solar Sharer Offer:** Details of the Commonwealth Government's upcoming Solar Sharer Offer (**SSO**) were released after the publication of the draft ISP. The SSO is intended to alter the timing of consumption, to draw more demand into the times of day when solar output is highest. It could also affect the economics of solar PV and home battery investments. AEMO should assess the impact of the Solar Sharer Offer to determine any impacts on peak demand forecasts and uptake of relevant CER technologies.<sup>11</sup>
- **Data centres:** Data centres are another significant area of uncertainty in energy system forecasting, Forecast demand from data centres is the single biggest driver of changes in overall demand. As a

---

<sup>6</sup> <https://www.dcceew.gov.au/energy/programs/cheaper-home-batteries>

<sup>7</sup> See also Ausgrid response to AEMO Forecasting Assumptions Update consultation

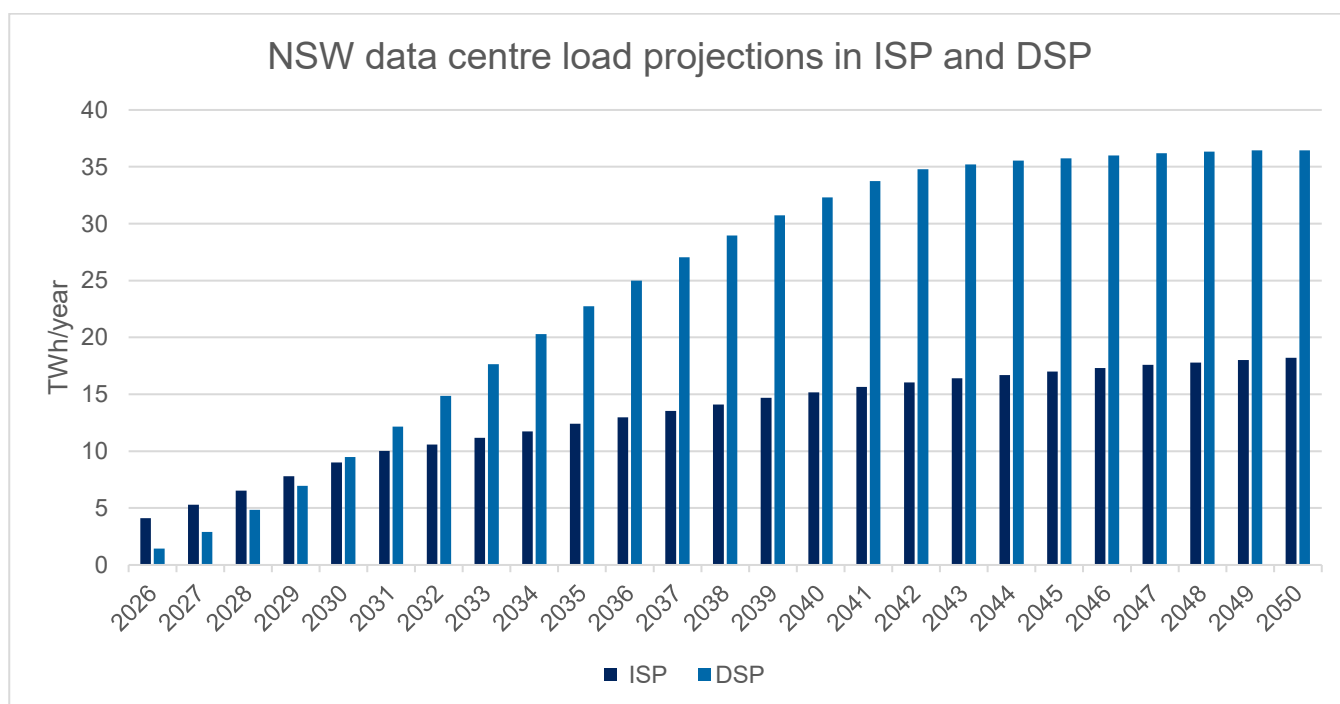
<sup>8</sup> [https://www.aemo.com.au/-/media/files/major-publications/isp/draft-2026/addendum-to-the-2025-inputs-assumptions-and-scenarios-report.pdf?rev=00798523a25e42078034d1878c337f19&sc\\_lang=en](https://www.aemo.com.au/-/media/files/major-publications/isp/draft-2026/addendum-to-the-2025-inputs-assumptions-and-scenarios-report.pdf?rev=00798523a25e42078034d1878c337f19&sc_lang=en) p. 7

<sup>9</sup> [https://www.aemo.com.au/-/media/files/major-publications/isp/draft-2026/addendum-to-the-2025-inputs-assumptions-and-scenarios-report.pdf?rev=00798523a25e42078034d1878c337f19&sc\\_lang=en](https://www.aemo.com.au/-/media/files/major-publications/isp/draft-2026/addendum-to-the-2025-inputs-assumptions-and-scenarios-report.pdf?rev=00798523a25e42078034d1878c337f19&sc_lang=en) p. 7

<sup>10</sup> <https://www.energy.gov.au/news/six-months-cheaper-home-batteries-program>

<sup>11</sup> <https://consult.dcceew.gov.au/solar-sharer-offer>

result, AEMO should contemplate a scenario in which data centre demand continues to grow beyond 2030, in line with the NSW DSP, if it is to credibly assess its ODP against the full range of plausible futures. Analysis conducted by Ausgrid and our NSW DNSP counterparts, based on detailed bottom-up analysis from our customer and connection enquiry information, as part of the NSW DSP, identifies significant differences with the Draft ISP in relation to data centre forecasts: While forecast NSW data centre load growth in the ISP (Step Change) slows in the 2030s, the DSP projects continued rapid growth until around the early 2040s, leading to a significant (~2x) divergence in forecast demand in the mid-to-late 2040s.<sup>12</sup> With considerable uncertainty about the data centre outlook. All forecasts should be treated with caution, but the DSP provides evidence that ISP assumptions should be reappraised (see Figure).



<sup>12</sup> <https://d2s3n99uw51hng.cloudfront.net/static/DSP%20Opportunities%20Report-v3.pdf> pp. 65-69