

2025 IASR Scenarios

August 2024

Submission to Consultation on 2025 IASR Scenarios

13 August 2024

Sent by email to: forecasting.planning@aemo.com.au

RE: Draft 2024 Integrated System Plan

About the ETU

The Electrical Trades Union of Australia ('the ETU') is the principal union for electrical and electrotechnology tradespeople and apprentices in Australia, representing well over sixty-thousand workers around the country.

Our members are involved in the construction, operation and maintenance of power generation throughout Australia, including in the declining fossil fuel sectors and the ever-expanding renewable industry sector. ETU members are also critical to the construction, maintenance and operation of transmission and distribution networks, and the installation and maintenance of household energy efficiency appliances and of consumer energy resources.

Acknowledgement

In the spirit of reconciliation, the ETU acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all First Nations peoples today.

2025 IASR Scenarios

The ETU welcomes the opportunity to provide feedback on the consultation on scenarios for AEMO's *Draft Inputs, Assumptions and Scenarios Report (IASR)*. Due to the disruption caused by the energy transition, processes such as the Integrated System Plan are a critical element in the careful and proper planning of the energy transition and ensuring that Australia achieves maximum economic and social benefits from the transformation occurring in our energy sector.

The ETU welcomes the inclusion of social licence as a sensitivity analysis to the inputs and assumptions that feed into the most recent iteration of the ISP, however, the ETU is concerned with the lack of inclusion of workforce development and worker transition in the ISP process. Together, social licence and workforce considerations are amongst the largest barriers to a successful energy transition and must be taken into account in any scenario analysis that will feed into future iterations of the ISP.

Since the 2023 IASR publication, what changes (such as environment, social, policy) do you consider most impact scenario development for the 2025 IASR scenarios?

1. "Future Made in Australia" and Impacts on Employment Factors

One of the most significant policy commitments made by the current federal government has been the announcement of significant increased investment in green manufacturing (including hydrogen and critical minerals refining) through the Future Made in Australia program. This will require significant increases in the required workforce and in generation and transmission capacity, even without significant, short-term increases in green exports.

For example, Jobs and Skills Australia (JSA) estimates that to deliver Rewiring the Nation and

82% renewable energy in the NEM, Australia will require an additional 32,000 electricians by 2030, with the commitment to full Net Zero needing a further 85,000 electricians by 2050. However, they estimate that the more ambitious "renewable energy superpower" scenario, would require an additional 42,500 electricians by 2030, with almost 100,000 additional electricians by 2050.¹

Recommendation: Current policy settings are not sufficient to meet this shortfall in electricians, and other critical occupations, and must be taken into account in any scenario analysis.

2. Opportunity offered by Offshore Wind

Previous iterations of the ISP failed to fully account for the opportunity offered by offshore wind. For example, in the draft 2024 Integrated System plan the development of Offshore Wind in NSW was notably absent from the ISP despite two OSW areas being declared by the Commonwealth and multiple OSW developers expressing an interest in developing projects. It appears this has been excluded due to NSW policy announcements on OSW, however these projects are in Commonwealth waters, not state waters.

Recommendation: The scenarios must properly consider the opportunity offered by offshore wind, and the developments in area and licence determinations that have occurred since 2023.

3. Changes to the National Energy Rules and Pricing in Social Licence Constraints

The 2023 changes to the National Energy Rules (NER) to encourage consideration of benefits beyond the narrow and restrictive notion of "net economic benefit to all those who produce, consume, or transport electricity in the market" is something that has long been needed to better facilitate a rapid and equitable transition to renewable energy transition, and must be taken into account in assessing and determining the appropriate energy mix in any scenario modelling and planning.

These amended Rules have the capacity to be interpreted in a way that better factors for social license considerations. There are several critical factors which, if left unaddressed by the proponents of new energy projects, could have cascading downstream implications leading to cost blowouts and lengthy delays, in turn having a negative impact on energy prices and security, as well as delaying any proposed emissions reductions benefits – and should be taken into account when determining the scope of different scenarios. For example:

• Failure of new energy projects to expand the available supply of domestic skilled labour, especially in priority occupations facing skills shortages, by offering ample training and

¹ Jobs and Skills Australia, Australian Government, *The Clean Energy Generation – Supplementary Modelling Report* (Report, 3 October 2023), <<u>https://www.jobsandskills.gov.au/download/19313/clean-energy-generation/2384/supplementary-report.pdf</u>>.



apprenticeship opportunities.

- Failure to offer wages and working conditions attractive enough to draw a sufficient skilled labour to a project especially in the midst of a tight labour market and severe skills shortages.
- Failure to contribute sufficiently to the development of local or other domestic supply chains for critical inputs in high global demand
- Failure to engage proactively and openly with local communities, including Traditional Owners, on matters such as land access rights, local employment and supply chain opportunities, and investment in community infrastructure as a means of negating any potential opposition that may halt or delay projects.

The 2024 ISP provided a cost to consumers if a low social licence tipping point is reached that results in no new renewable generation or transmission being built. However, it was not clear how that tipping point was determined, and how the modelling assesses the relative risks of a tipping point being reached in each of the CDPs.

Recommendation: The IASR must consider the impacts of low social licence in determining the optimal pathway for each scenario.

4. Household energy efficiency impacts of ratcheting of NaTHERS requirements and HEUF budget

NaTHERS recently introduced "whole of home" energy ratings that include the energy performance of major appliances such as hot water, heating and cooling, pool and spa pumps, as well as solar energy generated onsite and battery storage. This, when combined with the ratcheting of required energy ratings for new builds, should incentivise the uptake of CER and while putting downward pressure on demand through improved energy performance.

Recommendation: The IASR must take into account the ratcheting of NaTHERS requirements in determining the uptake of CER and the downward pressure that improved energy performance will place on demand.

Yours faithfully,

Michael Wright National Secretary, Electrical Trades Union