

Integrated System Plan (ISP) newsletter



30 June 2023

Welcome to the June 2023 ISP Newsletter, a quarterly update on the 2024 ISP process.

This issue includes updates on:

- How to get involved
- Recent consultations:
 - ISP Methodology
 - Transmission Expansion Options Report
 - Inputs Assumptions and Scenarios Report (IASR)
- An <u>ISP Consumer Panel</u> update on their recent activities and positions on issues currently under consideration.

AEMO sincerely thanks all stakeholders who took the time to make submissions. Stakeholder input is essential to the development cycle for the 2024 ISP.

How to get involved

Join the ISP mailing list to never miss an update.

- <u>Register here</u> to attend the 2023 ISP Methodology publication webinar on 13 July, 10-11:30am AEST.
- <u>Register here</u> to attend the Transmission Expansion Options Report publication webinar on 1 August.

Find past engagement material, including presentations and webinar recordings on the Opportunity for engagement webpage.

If you have any questions for the AEMO ISP team, please email <u>ISP@aemo.com.au</u>.



Figure 1 – The two-year ISP Development cycle

2023 ISP Methodology update consultation

The ISP Methodology sets out how AEMO will undertake modelling for the 2024 ISP. An update to the ISP Methodology was released consultation on 30 June 2023. This update follows consideration of 25 written and verbal stakeholder submissions.

AEMO identified 135 individual points and recommendations. A summary of the key themes is provided below. For a copy of stakeholder feedback and detailed responses, please view the final report. In response to feedback:

- AEMO has amended the ISP Methodology to • apply an actionable window concept to determine which projects are actionable. An actionable window will further ensure that transmission project lead time uncertainty can be appropriately accommodated. This will mean that a project that was first actioned in the previous ISP will potentially retain actionable status if it is required in the fouryear period starting at the earliest in-service date.
- In response to transmission project lead time adjustments, AEMO will develop lead times for transmission projects through joint planning with TNSPs and will consult on them via the Transmission Expansion Options Report. There is no change compared to the draft position.
- In regard to generation and transmission **build rates**, if the generation or transmission build in the draft or final ISP is observed to be lumpy, sensitivity analysis could be conducted to assess the impact of limiting infrastructure delivery based on a supply chain constraints.
- Modelling storage dispatch Based on feedback, AEMO has removed its proposed amendments to limit the foresight of storage devices in the ISP capacity outlook model.

- Treatment of renewable energy zone (REZ) transmission limits. In response to concerns. AEMO has made revisions to clarify that transfer limits are not reserved for particular generation types and has amended the REZ transfer limit formula to include large loads.
- There was general support for AEMO's proposal to better account for network losses by creating sub-regions and new associated sub-regional loss equations. AEMO has amended the ISP Methodology to use loss equations to better represent power transfers between specific REZs and sub-regions.
- Stakeholders were supportive of AEMO's two proposed updates to the assumed renewable resource quality of REZs: to screen sites via a desktop assessment of land use data and to adjust the wind resource quality percentiles used to delimit the high and medium wind resource tranches.
- There was strong support for the potential inclusion of a value of carbon emissions in the ISP, though common concerns were raised across the submissions as to how the value would be derived and who would be responsible for the derivation. AEMO will use reasonable endeavours to apply a value of carbon emissions if it is developed by an authoritative body for use in the electricity sector.
- The concept of gathering data to support the application of **consumer risk preferences** was broadly supported as long as the process in transparent. AEMO will consider evidencebased risk preference metrics in its application of professional judgement when selecting the optimal development path (ODP). AEMO will



consult on the application of risk preferences in the Draft ISP.

- Consistent with the Draft ISP Methodology, the duration of **Demand Side Participation** will be limited to a maximum of two hours of continuous operation per day in the reliability response band. AEMO may revisit this assumption when more data is available.
- There was strong support for a greater focus on social licence in the ISP, particularly around the ongoing need to consider social licence for transmission projects. AEMO agrees that social licence is a highly critical matter for infrastructure in the ISP. AEMO will continue to proactively work with its Advisory Council on Social Licence and the ISP Consumer Panel to establish an agreed position on its role relating to the ISP. AEMO will also undertake sensitivity analysis in the 2024 ISP to consider the impact of social licence-related matters.

2023 Transmission Expansion Options Report consultation

This report packages up network expansion options, and is developed as an input to the ISP. It provides the technical and economic information on potential transmission upgrades required to optimise transmission investments with generation and storage.

The draft report was prepared with advice and feedback from the transmission network service providers and relevant government organisations.

The <u>Draft Transmission Expansion Options Report</u> was published on 2 May 2023, for stakeholder comment by 31 May 2023. A <u>webinar</u> was held on 18 May 2023 and consumer advocate sessions on 19 May and 31 May 2023. AEMO received 25 written and verbal submissions. Most of the submissions were enquiries on particular flow paths, REZ augmentations and social licence matters, transmission project cost estimates and forecasting approaches, operating expenditure estimates and non-network options. AEMO will summarise responses to stakeholder feedback and outline how the report has changed in a Consultation Summary Report, to be published alongside the final 2023 Transmission Expansion Options Report on 28 July 2023. <u>Register here</u> to attend a webinar following publication, on 1 August 2023.

The expansion options in the Report will feed into the Draft 2024 ISP, to be released in December 2023.

2023 Inputs Assumptions and Scenarios Report consultation

AEMO published the Draft 2023 IASR on 16 December 2022, with stakeholder submissions invited by 16 February 2023. AEMO received 69 submissions from a wide variety of stakeholders. AEMO sincerely thanks all stakeholders who took the time to make submissions. Stakeholder input is essential to the production of robust 2023 IASR. All consultation materials, including non-confidential submissions, are

available on <u>AEMO's</u> website.

On 22 March 2023, AEMO held a public forum to provide an overview of the key topics raised by stakeholders. On 15 June 2023, AEMO held a



webinar to present how the scenarios and sensitivities had evolved to incorporate consultation feedback. The webinar presentations and recordings are available <u>here</u>.

The final IASR will be published on 28 July 2023.



The following section is an update directly from the ISP Consumer Panel members: Mark Henley, Bev Hughson, Mark Grenning and Craig Memery.

Consumer Panel members

Jo de Silva has recently left the Panel, for a new job, we thank Jo for her contributions. Bev Hughson has recently joined the Panel and jumped straight into action – welcome Bev.

Consumer Panel activities

The development of the 2024 ISP is heating up with the Inputs Assumptions and Scenarios Report due to be published at the end of July and then the draft ISP 2024 released in just over six months' time, in December. The next six months will see significant amounts of computer modelling as the 'grunt' work of converting inputs and assumptions into useable information about how the various scenarios could play out.

External factors impacting on the ISP process also

continue to maintain the rapidly changing setting of Australian energy markets. For example, the Federal budget announced a \$2 billion "Hydrogen Headstart" initiative to support green hydrogen projects while cost of living pressures were



strengthened with the AER's default market offer (DMO) increased for 2023-24 by amounts in the range of 20%-25%.

The Panel has made submissions to AEMO in response to draft Methodology and Transmission Expansion Options Report consultation papers.

Transmission Expansion Options Report (TEOR)

The Panel has made a submission to AEMO regarding the Transmission Expansion Options Report which builds on the previous Transmission Cost Database. Our submission included the following overview comment:

"The development of the Transmission Cost Database has been a major achievement by AEMO. The basis for ISP network capital costs has progressed from a simple excel spreadsheet with no explanation of how the estimates were derived in the 2020 ISP, to the first iteration of the database in the 2022 ISP with significant further developments presented in this Transmission Expansion Options Report."

Our main submission comments are summarised as:

"We assessed (consultant) Mott MacDonald's (MM)

proposed updated Transmission Cost Database and AEMO's application of the results to obtain the capex estimates.



Our conclusion is that while the 2023 version of the Transmission Cost Database is a significant improvement on the version used in the 2022 ISP, the MM forecasting approach and the way AEMO has adopted the MM report may lead to potentially considerable underestimates of forecast network capex. This submission argues that:

- MM have underestimated supply chain impacts by their use of historical data as a basis for forecasts and no obvious consideration of the impact of the US Inflation Reduction Act.
- AEMO's application of the Association for the Advancement of Cost Engineering framework to determine the level of cost accuracy in Class 5a/5b estimates is flawed with no empirical basis to the conclusions made especially around modelling of unknown risks and the conclusion of symmetrical cost accuracy.

- AEMO's justification is weak for its assumed 'return to normal' date of 2027 ie the date after which the real level of costs stay constant.
- The final version of the Transmission Expansion Options Report should provide greater transparency around how AEMO will 'cross check' capex estimates provided by TNSPs to ensure there is consistency across projects in different jurisdictions; at this stage the 'cross check' seems more like an 'empty box' than anything substantive."

The full submission is available on AEMO's ISP website.

Consumer Risk Preferences

A major recommendation from the 2022 Consumer Panel was for consumer risk preferences to be actively explored and incorporated into the 2024 ISP considerations.

This has been a significant focus of Panel work over the past couple of months, working closely with AEMO and their consultant to explore consumer risk preferences, including developing 'a metric' that can be incorporated into the ISP modelling.

We have observed all seven of the extended focus groups that have been conducted over the past three weeks in Ballarat, Rockhampton, Brisbane, Sydney, Melbourne, and Adelaide. There

were 83 people involved in these groups who helped explore the complexities of assigning risk preferences for (small use) customers. The next stage for this project is a national level survey which will add to the focus group data to create a consumer risk metric and important perspectives to be included in the ISP report. The Panel eagerly awaits the survey data and will be actively involved in analysis of the data and considerations of the consumer risk preference 'metric.'

Staying engaged with the ISP development process

At the time of writing this Newsletter, the Panel was considering draft reports about cost of capital and gas pricing.

L

Consumer Panel members are happy to meet online with community and consumer groups with an interest in the ISP and keen to hear thoughts about any aspect of the ISP from consumers. To contact us email: consumerpanel@aemo.com.au.

All AEMO engagement activities being undertaken as part of the development of the 2024 ISP are listed on the Opportunities for Engagement page on our website. This forward calendar of activities is updated regularly.

If you have any questions for the AEMO ISP team, please email <u>ISP@aemo.com.au</u>.

