

ISP Methodology Issues Paper

Webinar

1 November 2024



Please note that this webinar will be recorded and published online.





We acknowledge the Traditional Custodians of the land, seas and waters across Australia. We honour the wisdom of Aboriginal and Torres Strait Islander Elders past and present and embrace future generations.

We acknowledge that, wherever we work, we do so on Aboriginal and Torres Strait Islander lands. We pay respect to the world's oldest continuing culture and First Nations peoples' deep and continuing connection to Country; and hope that our work can benefit both people and Country.

'Journey of unity: AEMO's Reconciliation Path' by Lani Balzan

AEMO Group is proud to have delivered its first Reconciliation Action Plan in May 2024. 'Journey of unity: AEMO's Reconciliation Path' was created by Wiradjuri artist Lani Balzan to visually narrate our ongoing journey towards reconciliation - a collaborative endeavour that honours First Nations cultures, fosters mutual understanding, and paves the way for a brighter, more inclusive future.



Read our RAP I



Agenda

- Acknowledgement of Country
- Introduction
- Key issues and AEMO's proposed approach
- Next steps
- Q&A
- Feedback survey



Today's objective



Present an outline of the key themes in the ISP Methodology Issues paper released on 23 October 2024.



After the presentation, you will have the opportunity to ask AEMO questions, using Slido.



Issues paper -Standard consultation for the National Electricity Market

Published: 23 October 2024

aemo.com.au

New South Wales | Queensland | South Australia | Victoria | Australian Capital Territory | Tasmania | Western Australia Australian Energy Market Operator 11d ABN 94.072.010.327

Read the issues paper here

How to interact today





- Please ask question using Slido
 - Either open the Slido tab at the top of your Teams window
 - Or open <u>www.sli.do</u> <u>#AEMO</u>
 - Up-vote questions that you are interested in
- Written replies may be provided through Slido if appropriate
- AEMO will not provide responses to unanswered questions



Introduction

Eli Pack Group Manager System Planning



AEMO undertakes a two-year process to deliver the Integrated System Plan

Standards and policies

KEY

AEMO consultative proc



AEMO

AEMO is consulting on its methodology for the ISP



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Inputs, Assumptions

and Scenarios Report

(IASR)

ISP Methodology

Draft & Final ISP



AEMO is seeking early input on key changes to the ISP **Methodology**

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1. Expand the gas supply model and introduce gas development projections in the ISP

2. Develop an approach to analyse distribution network capabilities for CER and other distributed resources

- **3.** Test for actionability at project proponents' timing
- **4.** Lay out a method for separately modelling hydrogen electrolyser loads

5. Address perfect foresight for storage devices in the time-sequential model

6. Enhance analysis of power system security

7. Add flexibility to model candidate REZs with large dispatchable loads

8. Add flexibility to better represent the diversity of potential wind resources within large candidate REZs

9. Consider REZ benefits more closely by changing the process for take-oneout-at-a-time analysis







Key proposed changes

Grant Clements, Manager Market Operability Samantha Christie, Manager Strategic Planning Saliw Cleto, Manager Integrated Modelling



Expanding the gas supply model and introducing gas development projections

AEMO proposes to:

- Develop and apply a gas supply expansion model.
- Through industry consultation, develop a database of pipeline, storage, and/or production augmentation options.
- Use the expanded gas supply model to develop at least one plausible gas development projection per scenario.
- Apply daily gas consumption limits and set minimum operational capabilities for some generators.
- Consider secondary fuels (such as diesel or hydrogen) where appropriate.







Analysing distribution network capabilities and opportunities for consumer energy resources and other distributed resources

AEMO proposes to:

- Include representation of existing distribution network capabilities and future augmentation opportunities, through extensive consultation with distribution networks.
- Allow the ISP model to consider opportunities for distribution network augmentations to facilitate increased operation from CER and other distributed resources.



Note: Other distributed resources may also be included in the left-hand side of this equation.



Testing for actionability at project proponents' nominated timing

Within the cost benefit analysis undertaken for the ISP, AEMO proposes to:

- Test previously-actionable projects at their proponent's nominated timing within the actionable window, rather than at all possible times within the window. The proponent's date will be informed by regulatory and engagement activities that have already been commenced after the initial identification of actionability.
- AEMO would also test at the 'restart timing', after the end of the actionable window plus a period to represent the additional time required to pause and then re-start all project activities.



Note: EISD is the 'earliest in-service date' nominated by the project proponent.



Enhancing selected ISP modelling approaches

AEMO proposes changes to ensure the ISP model remains fit-for-purpose, including:

- Enhanced modelling of fixed loads for hydrogen electrolysers.
- Changing the modelling of storage devices to consider addressing 'perfect foresight' in the model.
- An updated approach to representing total system strength costs and an updated method for assessing inertia levels.
- Strengthening the representation of candidate renewable energy zones to allow consideration of:
 - Any large dispatchable loads in REZs
 - Greater diversity of potential wind resources
- Allowing a broader assessment of benefits in take-one-out-at-a-time analysis.



Next steps



Completing the ISP Methodology review



For more information

- Join the ISP mailing list to never miss an update
- The 2026 ISP stakeholder engagement strategy and past engagements including webinar recordings can be found on the <u>2026 ISP engagement webpage</u>
- Questions? Please contact the AEMO ISP team: <u>ISP@aemo.com.au</u>

AEMO

2026 ISP Timetable







Questions and discussion

Ask your question at www.Sli.do #AEMO



Feedback welcome: click here

Ask your question at www.Sli.do #AEMO



For more information visit

aemo.com.au