





Call for non-network options – 2024 Integrated System Plan

Sydney Ring South Project

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Notice of consultation

2024 INTEGRATED SYSTEM PLAN CALL FOR NON-NETWORK OPTIONS – SYDNEY RING SOUTH PROJECT

This notice informs all Registered Participants and interested parties that AEMO is requesting submissions for non-network options for the Sydney Ring South project. This project is identified as an actionable ISP project in the 2024 *Integrated System Plan* (ISP). This request for submissions for non-network options has been prepared in accordance with the requirements of clause 5.22.14(c)(1) of the National Electricity Rules (NER).

Matter under consultation

The transmission network in the Sydney, Newcastle, and Wollongong (SNW) area was originally designed to connect large coal-fired generators in the Hunter Valley to supply the SNW load centres. When these coal-fired generators retire, the network has insufficient capability to supply SNW load centres from generators located outside of the Hunter Valley.

The Sydney Ring South project increases transfer capacity into the SNW load centres. The Hunter Transmission Project¹, also referred to as Sydney Ring North, is being progressed under the *Electricity Infrastructure Investment Act* 2020 (NSW).

The southern part of this project is named Sydney Ring South. AEMO has identified the Sydney Ring South project as an actionable ISP project in the 2024 ISP. Additional transmission network augmentation to connect Central New South Wales (CNSW) and SNW, local generation and/or load reductions within SNW and/or energy storage within SNW is needed to reliably supply the load centres within the SNW area.

The matter for consultation is a call for non-network options for the Sydney Ring South project. This consultation notice:

- Describes the identified need that the Sydney Ring South project (including any non-network option)
 is addressing; and
- Provides detail on the required technical characteristics that non-network options must meet for the Sydney Ring South project.

Identified need for investment

The identified need for the Sydney Ring South project² is:

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¹ See https://www.energyco.nsw.gov.au/projects/hunter-transmission-project

² This Sydney Ring South project is subject to the ISP framework under the National Electricity Rules. The Hunter Transmission Project, also referred to as Sydney Ring North, is being progressed under the *Electricity Infrastructure Investment Act* 2020 (NSW). The ISP modelling includes Hunter Transmission Project being completed before or at the same time as Sydney Ring South.



- to deliver net market benefits for consumers to increase the power system's capability to supply the Sydney, Newcastle and Wollongong load centres, replacing supply capacity that will be removed on the closure of coal-fired power stations in the Newcastle area, and
- efficiently service increasing peak demand.

Technical characteristics

During periods of SNW load exceeding 8,000 megawatts (MW) and low periods of variable renewable energy (VRE) generation from northern and central New South Wales, network constraints provide opportunities for strategically placed battery storage, pumped hydro and/or local generation. These solutions could defer or reduce the scale of proposed transmission network augmentation from south of Sydney.

AEMO is not prescriptive at this early stage of the regulatory process regarding the role of non-network options and operating profiles for these solutions. AEMO is interested to hear from parties regarding the potential for non-network options to satisfy, or contribute to satisfying, the identified need, and from potential proponents of such non-network options.

AEMO encourages proponents of potential non-network solutions to make a submission to this consultation, as any new credible options received must be considered in the Regulatory Investment Test for Transmission (RIT-T).

Information to be provided by proponents of a non-network option

The types of non-network services mentioned above are not intended to limit the potential non-network services that may meet the identified network need. AEMO welcomes all non-network service providers to provide a submission for proposed non-network options they believe can address the identified need outlined above.

To aid RIT-T proponents in their consideration of non-network option proposals, AEMO recommends that submissions include the following details:

- Organisational information and key contact details.
- Relevant experience to demonstrate the capability and current utility-scale delivery of the technology.
- Technical details of the service, including location (transmission substation), size, operating profile and limitations, and availability.
- Total cost and scalability of service, separating capital and operating expenditure.
- Confirmation of any timelines involved in providing the service, including construction, grid connection, testing, and commissioning dates.
- Responsibility and liability arising directly or indirectly from the operation or failure of the nonnetwork solution.
- · Demonstration of the proponent's financial viability.
- Evidence of external funding contributions (such as from the Australian Renewable Energy Agency (ARENA) or government).

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The consultation process

The consultation process is outlined below.

Process stage	Date of publication
Publication of notice of consultation	26 June 2024
Closing date for submissions	18 September 2024
Project Assessment Draft Report (PADR) publication	30 June 2025

Following the receipt of non-network option submissions, AEMO will provide these to the relevant RIT-T proponent identified in the 2024 ISP, Transgrid, to consider in the RIT-T for this actionable ISP project. RIT-T proponents are required to consider any new credible non-network options that were not previously considered in the ISP that meet the identified need, including any non-network options submitted to AEMO in response to this notice³.

Invitation to make submissions

AEMO invites written submissions on the matter under consultation.

Please identify any parts of your submission that you wish to remain confidential, and explain why. AEMO may still publish that information if it does not consider it to be confidential, but will consult with you before doing so. Copies of all submissions received by AEMO will be provided to Transgrid as the RIT-T proponent for the Sydney Ring South project as specified in the 2024 ISP.

Closing date and time

Submissions in response to this Notice Consultation should be sent by email to isp@aemo.com.au by 5.00 pm (AEST) on 18 September 2024. All submissions must be forwarded in electronic format (PDF preferred). Please send any queries about this consultation to the same email address.

Publication

All submissions will be published on AEMO's website, other than confidential content.

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³ Australian Energy Regulator (AER), Regulatory Investment Test for Transmission, paragraph 2(c)(iii).