

Waddamana to Palmerston transfer capability upgrade project

Call for non-network options

13 December 2024

Official



Powering a
Bright Future

Version	Date	Author initials
Draft	4/12/2024	SL
Final	12/12/2024	MC

TasNetworks acknowledges the palawa (Tasmanian Aboriginal community) as the original owners and custodians of lutruwita (Tasmania). TasNetworks, acknowledges the palawa have maintained their spiritual and cultural connection to the land and water. We pay respect to Elders past and present and all Aboriginal and Torres Strait Islander peoples.

Contents

Background	3
Matter for consultation	3
Identified need for investment	4
Technical characteristics of non-network option	4
Information to be provided	4
Next Steps	5

Background

The Australian Energy Market Operator's (AEMO's) Integrated System Plan (ISP) is a roadmap for the transition of the National Electricity Market (NEM). The ISP's optimal development path (ODP) sets out the generation, storage and network investments needed to reach net zero by 2050, while maximising benefits to customers.

As part of the ISP, AEMO identifies actionable projects that meet an identified need and form part of the ODP. Actionable ISP projects deliver positive net market benefits to consumers if progressed before the next ISP, so should progress via the relevant regulatory framework immediately.

In response to significant new wind generation forecast for Tasmania's Central Highlands Renewable Energy Zone (REZ), AEMO identified the Waddamana to Palmerston transfer capability upgrade ("the project") as an actionable ISP project in the 2024 ISP.

The Central Highlands REZ has excellent quality wind resources and has good pumped hydro resources for potential future build. It is located close to major load centres at Hobart.

This project will facilitate increased power transfer between Waddamana and Palmerston substations. It will also enhance power sharing in the Palmerston and Sheffield and Palmerston to Hadspen transmission corridors to support increased power transfer on the proposed Marinus Link interconnector.

As specified in the 2024 ISP, TasNetworks is responsible for undertaking the Regulatory Investment Test for Transmission (RIT-T) for the project. The RIT-T is a cost-benefit assessment designed to identify the preferred solution to meet the identified need. The preferred solution is the option that maximises net market benefits to all those that consume, transport and generate electricity in the NEM. As part of the RIT-T, TasNetworks must present the methodology and outcome of the cost-benefit assessment in a Project Assessment Draft Report (PADR) by 26 June 2025.

As part of the ISP published in June 2024, AEMO called for submissions from non-network service providers able to satisfy, or contribute to satisfying, the identified need. AEMO has provided these submissions to TasNetworks for consideration in the PADR.

In publishing this notice, it is TasNetworks' intention to reach a broader range of stakeholders that may not have been aware of AEMO's process administered during the 2024 ISP. In this vein, we do not intend to duplicate the AEMO process, rather leverage our own networks to ensure we have considered all potential options.

Matter for consultation

Given non-network solutions can defer the need for network investment and reduce costs to customers, TasNetworks is very interested to explore whether there are any further non-network service providers that could contribute to addressing the need. This notice informs all Registered Participants and interested parties that TasNetworks is requesting further submissions from new or existing proponents.

This consultation notice:

- Describes the identified need for the Waddamana to Palmerston transfer capability upgrade project; and
- Provides detail on the required technical characteristics that non-network options must meet for the Waddamana to Palmerston transfer capability upgrade project.

Identified need for investment

The purpose of this consultation is to identify any non-network solutions capable of wholly, or partially, addressing the identified need specified in the 2024 ISP.

The identified need for the Waddamana to Palmerston transfer capability upgrade project is to:

- increase power system capability of the transmission network between Central and North Western Tasmania, and
- support the expected increase in renewable generation in Central Highlands REZ in the vicinity of Waddamana region.

Primarily the identified need is the thermal limitation of the Waddamana to Palmerston transmission corridor for northwards flow with significant new wind generation forecast in the Central Highlands REZ.

Technical characteristics of non-network option

During periods of high variable renewable energy in the Central Highlands, network constraints provide opportunities for strategically placed battery storage, pumped hydro and/or local load to reduce the level and/or duration of power flow from Waddamana to Palmerston. These solutions could defer or reduce the scale of proposed transmission network augmentation from Waddamana to Palmerston.

TasNetworks is not prescriptive at this early stage of the regulatory process regarding the role of non-network options and operating profiles for these solutions.

For comparison, as part of the ISP, AEMO proposed an indicative network solution to address the identified need. The ISP candidate option in this case is:

- a Palmerston-Waddamana 220 kV double-circuit line; and
- 2 x power flow controllers on the 2 x 220 kV transmission lines from Palmerston-Sheffield.

It is expected that a non-network solution would need to be capable of either delaying or removing the need for this network investment.

TasNetworks 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 RIT-T

Information to be provided

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

To ensure TasNetworks can consider proposals in a timely manner, submissions should 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 non-network solution.
- Demonstration of the proponent’s financial viability.
- Evidence of external funding contributions (such as from the Australian Renewable Energy Agency (ARENA) or government).
- Evidence confirming whether the proposed assets are ‘committed’ or ‘anticipated’ consistent with AEMO’s definition.

Next Steps

The consultation process is outlined below.

Process stage	Date of publication
Publication of notice of consultation	13 December 2024
Closing date for submissions	31 January 2025
PADR publication	26 June 2025

TasNetworks will consider the credibility of any non-network options proposed through this consultation. To be considered credible a non-network solution must:

- addresses the identified need described in the 2024 ISP;
- is commercially¹ and technically feasible²; and
- can be implemented in sufficient time to meet the identified need.

Should a non-network solution be deemed credible, TasNetworks will assess its costs and benefits against other solutions capable of meeting the need and publish the outcome in the PADR.

TasNetworks invites written submissions on the matter under consultation. Please identify any parts of your submission that you wish to remain confidential and explain why. Submissions in relation to this request can be sent directly to: regulation@tasnetworks.com.au by 31 January 2025.

Submissions will be published on TasNetworks’ website, unless otherwise requested by the proponent. We will respond to submissions as part of the PADR.

If you have any questions, please submit an information enquiry to regulation@tasnetworks.com.au prior to 31 January 2025.

¹ An option is commercially feasible if a reasonable and objective operator, acting rationally in accordance with the requirements of the RIT-T, would be prepared to develop or provide the option in isolation of any substitute options.

² An option is technically feasible if there is a high likelihood that it will, if developed, provide the services that the RIT-T proponent has claimed it could provide for the purposes of the RIT-T assessment.



www.tasnetworks.com.au

Waddamana to Palmerston transfer capability upgrade project
Official