Waratah Super Battery Project

Revenue Summary

December 2023

AUSTRALIAN ENERGY REGULATOR

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1 The Waratah Super Battery Project

1.1 What is the Waratah Super Battery project?

The Waratah Super Battery (WSB) project is an electricity network infrastructure project in NSW. The project increases the amount of power that can be transferred across the NSW transmission network to large population centres while maintaining the reliability of power supply and protecting the network. It is being delivered under the NSW Electricity Infrastructure Roadmap.

The potential early closure of the Eraring power station in 2025 is forecast to lead to a reduction in the amount of power that can be supplied to Sydney, Newcastle, and Wollongong, below an acceptable level (the Energy Security Target).

To address this, the transfer capacity of the transmission lines connecting existing generators in the Northern and Southern regions of NSW to Sydney, Newcastle, and Wollongong are being increased. This will allow existing generators to increase power output and power supply across the network.

Increasing the power transferred across transmission lines increases the risk of damage to the transmission network under a contingency event or fault on the network. To ensure the safety and security of the network, a System Integrity Protection Scheme (SIPS) is being implemented as part of the WSB project.

The SIPS consists of a large battery (the Waratah Super Battery), a communications system and a paired generation service. Under a contingency event or fault, continuing to transfer power across the transmission network could damage the network. To prevent this, the communications system will signal the generators providing the paired generation service, to rapidly reduce power output until the contingency event is resolved. At the same time, a signal is sent to the battery to discharge, ensuring a continuous power supply while the contingency event or fault is addressed.

1.2 How is the project being delivered?

The project consists of four components:

1. The SIPS battery service – a battery that is able to discharge power for up to four- 30-minute intervals, in response to a signal from the SIPS communication system.
2. The paired generation services – a portfolio of generators that are contracted to run back (reduce power output) in response to a signal from the SIPS communication system.
3. The SIPS communications system – a software system and signalling equipment, operated by Transgrid, that will detect contingencies and faults across the network and rapidly signal paired generators to run back and the battery to discharge (supply power).
4. Network augmentations - raising and tightening transmission lines and upgrading a series of substations, to increase the transfer capacity (amount of power that can be transmitted) of the transmission network.

EnergyCo is the infrastructure planner for all projects delivered under the NSW framework (the *Electricity Infrastructure Investment Act* 2020 (EII Act) and the *Electricity Infrastructure*

Investment Regulation 2021 (EII Regulation)). It is responsible for identifying and initiating network infrastructure projects, including how they are to be delivered.

As the infrastructure planner, EnergyCo, undertook contestable processes to select the entities that would provide the battery service and the paired generation services. Contestable processes are competitive market procurement exercises, which involve the assessment and evaluation of confidential and competing bids to deliver the service from market participants. These processes promote competition which reveals the prudent, efficient, and reasonable costs of carrying out the project.

The AER's assessment of the contestable process to select the entity to deliver the battery service was completed in December 2022, with Akaysha Energy identified as the successful entity. Our assessment of the contestable process to select the entities to provide the paired generation services was completed in November 2023.

Transgrid was appointed the Network Operator for the WSB project and directed to deliver and operate it by Ministerial Order. As the operator of the NSW transmission network, Transgrid was considered best placed to implement and manage the SIPS control scheme, including direct responsibilities for developing the SIPS communications system and implementing the required network augmentations.

1.3 What is the role of the AER?

As the regulator appointed under the EII Act, we are responsible for determining the revenue the Network Operator may be paid for delivering and operating the SIPS. The revenue is paid to Transgrid by the Scheme Financial Vehicle in quarterly instalments that reflect the payment schedules contained in our revenue determinations.

- As the contestable procurement processes for the battery and paired generation services were genuine and appropriate processes, we have relied on these processes to produce prudent, efficient, and reasonable costs and can adopt these amounts in our revenue determinations for these components of the WSB project.
- The non-contestable components of the project are subject to assessment by us to ensure only the prudent, efficient, and reasonable costs of the delivering the project are recovered.

1.4 What is the total revenue requirement?

At the time of our battery service determination, we accepted that the schedule of payments and some other information should be kept confidential in the public version of our determination. However, we noted that once our determination for the paired generation services had been made, we would aggregate the annual and total revenue amounts for these two determinations and publish them. This was agreed to by Transgrid and EnergyCo.

In our battery service and paired generation determinations we stated that we strongly believe that consumers should be informed of the costs and benefits of network infrastructure projects that they are ultimately required to pay for. We also noted that there is a discipline that transparency imposes and that NSW electricity consumers expect our determinations to provide this transparency for all contestable and non-contestable network infrastructure projects.

Consistent with our commitments, this document provides: the aggregated total and annual amounts payable to Transgrid for the contestable components of the project, the non-contestable components, and the entire project (Attachment A). It contains:

- The aggregated annual schedule of payments for contestable components of the WSB project.
- The annual schedule of payments for non-contestable components of the WSB project.
- The aggregated annual schedule of payments for all components of the WSB project.

We believe providing this information in an aggregated form provides the transparency required by consumers, while protecting the confidentiality of competitively sensitive information.

1.5 Will the revenue change?

From time to time, the schedule of payments contained in our determinations may be adjusted (upwards or downwards) in response to specified events. These events are outlined in adjustment mechanisms contained in our revenue determinations. These adjustments occur in response to an adjustment proposal from the Network Operator, which we will review and decide upon.

The annual and total amounts set out in Attachment A will be updated in July each year for the duration of the regulatory period (2024-29), to reflect adjustments we approve to any of the components of the WSB project.

Additional Documents

For more information, this document should be read along with the following documents:

- Revenue Determination (Contestable): Transgrid – Waratah Super Battery – System Integrity Protect Scheme Service component, December 2022.
- Revenue Determination (Contestable): Transgrid – Waratah Super Battery – Paired Generation Services component, November 2023.
- Revenue Determination (non-contestable): Transgrid – Waratah Super Battery – non-contestable components, December 2023.