

Waratah Super Battery Enabling Works

Information for landowners and communities

September 2024



Transgrid will deliver upgrades to its existing transmission lines and substations to unlock the benefits of the Waratah Super Battery (WSB).

About Transgrid

Transgrid operates and manages the high-voltage network in NSW and the ACT. We operate a safe, reliable and efficient high-voltage grid that connects electricity generators to one in three Australians. We are building the future grid to enable greater renewable integration and drive down wholesale electricity prices.

What are the Waratah Super Battery Enabling Works (WSB Enabling Works)?

In response to the anticipated closure of Eraring Power Station, the NSW Minister for Energy under the Electricity Infrastructure Investment Act directed the WSB Enabling Works to be constructed. It consists of:

- A System Integrity Protection Scheme (SIPS) - The SIPS is designed to monitor transmission lines and enable the WSB to act as a ‘shock absorber’ in the event of any sudden fault on the transmission system. The SIPS will monitor thirty-six 330 kV transmission lines for overloads. To enable the SIPS to operate, monitoring equipment will be installed at 16 substations and a control system will be implemented at a further site.
- Augmentation works at 22 substations throughout the network.
- Augmentation works at four 330 kV transmission lines to unlock additional capacity on a total of twenty-five 330 kV transmission lines.

What are the project benefits?

The WSB Enabling Works will:

- Enable additional transmission capacity and stability rather than additional electricity storage capacity.
- Allow consumers to access more energy from existing, and future electricity generators located outside the Sydney / Newcastle / Wollongong load centre, while maintaining network reliability.
- Improve network reliability by instructing the WSB to inject electricity into the network when an overload is detected. Reduce risk of network overloads by reducing the amount of electricity generators can inject into the network during certain periods.

What is the Waratah Super Battery?

The WSB, also known as a “Battery Energy Storage System (BESS)”, is located approximately 100km north of Sydney at the site of the former Munmorah Power Station. When complete, the WSB will have a capacity of 850 MW and energy storage of 1,680 MWh.

Transgrid is not building the WSB. Akaysha Energy has been appointed by the Infrastructure Planner, EnergyCo, to build, own and operate the WSB.

To find out more: <https://www.energyco.nsw.gov.au/projects/waratah-super-battery>



Pictured: Waratah Super Battery Enabling Works map

Why are the enabling works needed?

The current capacity of existing transmission lines does not meet the required rating to transmit the generation capacity required once the Waratah Super Battery is implemented.

What do the enabling works entail?

Transgrid will:

- improve clearances from lines to the ground for 4 transmission lines by:
 - strengthening some existing structures
 - implementation of new insulator arrangements
 - minor landscaping works to remove high points which have the potential to infringe on safe clearances.
- new access tracks to the 4 transmission lines where required
- updating existing access tracks to the 4 transmission lines
- replace selected equipment in 40 switch bays over 22 substations to complete the uprating of 25 transmission lines

What will the new transmission structures look like?

Some existing structures will be replaced with either a two or three-pole configuration. Not all structures will require replacing.

The height of both structure types is between 30 – 40 meters.



Pictured: An example of a three pole configuration.



Pictured: An example of a two pole configuration.



Key Dates



Construction start

October 2023



Operations start

November 2024 - March 2025

How do I find out more information

For more information including detailed FAQ's, please visit: <https://www.transgrid.com.au/projectsinnovation/waratah-super-battery-enabling-works>

Or to reach out to the project team:

Phone: 1800 222 537

Email: network.solutions@transgrid.com.au



Connect with us

Transgrid is committed to working with landowners and communities as we deliver on the Government's energy transition. We want to find solutions that work for everyone. Please contact us for more information.



Contact details

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Our business hours are 8:30am – 5:00pm

Find out more at:
Transgrid.com.au

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