

## PROJECT OVERVIEW – TALLAWANG SOLAR FARM

The Tallawang Solar Farm is a solar and battery storage project proposed by UK-owned renewable energy developer RES, located approximately eight kilometres northwest of Gulgong. The Tallawang Solar Farm is in the Central West Orana Renewable Energy Zone (CWO REZ), Australia's first Renewable Energy Zone.

Once constructed, the Tallawang Solar Farm will generate up to 500MW across approximately 1,300 hectares of already cleared farmland, with a total development footprint of approximately 800 ha.

The proposed solar farm will generate enough energy to supply approximately 330,000 NSW households. If developed, the project will share direct benefits with project neighbours.

The proposed solar project will utilise bi-facial solar modules to generate energy from both the front and rear of the panels. Panels are up to five metres high and installed on rows spaced up to 12m apart, allowing for the potential for sheep to graze beneath the solar panels.

To enable the transfer of energy, other relevant infrastructure will be positioned across the site, such as inverters, transformers, and battery units. There will also be an on-site site office, storage facility, and temporary laydown areas during construction.

The primary access to the site is along Castlereagh Highway, with potential secondary site entrances on Puggoon Road to facilitate emergency vehicle access and stock movement.

In 2021, RES undertook detailed environmental, social and economic assessments for the project. RES submitted a development application supported by an Environmental Impact Statement (EIS) for the Tallawang Solar Farm in October 2022. The EIS was placed on public exhibition during October and November 2022, and 70 submissions were made on the Project EIS. A Submissions Report and Amendment Report are being prepared to respond to the EIS submissions and identify project amendments. The primary amendments are included in the table overleaf.

## **Project Amendments**

RES has amended the site layout since the Public Exhibition of the EIS. These updates include:

- Implementation of a 400-person Temporary Workers Accommodation (TWA) facility within the Project Area.
- An updated intersection upgrade at the proposed site access on Castlereagh Highway.
- Removal of the 13 km overhead transmission line traversing through the Barneys Reef Wind Farm, as this is now included in EnergyCo's CWO-REZ Transmission Project.
- Increased BESS capacity from 200MW/400MW-h to 500MW/1000MW-h
- Minor layout refinements, including removal of the northern substation option; installation of additional solar panels within already disturbed areas; realignment of the security fence line to improve wildlife connectivity.
- Minor readjustment of the Project redline boundary area to include the intersection upgrade on the Castlereagh Highway which provides access to the solar Farm.

## Tell us what you think

Please scan the QR code or follow the below link to complete a survey on the Tallawang Solar Farm Project Changes.

https://www.research.net/r/ TallawangSF





A summary of the key project amendments between the EIS Project and the Amended Project is provided in the table below:

Project Element	EIS Project	Amended Project
Project area	Approximately 1,370 ha	Approximately 1,300 ha
Development footprint	Approximately 866 ha	Approximately 800 ha
Project Access	Project access will be via the Castlereagh Highway to a local unserviced road directly south of the Project Area.	No change.
Intersection upgrade	A short Channelised Right turn (CHR) and an Auxiliary Left turn (AUL) treatment on the Castlereagh Highway. This provides a partial turning lane width for vehicles turning right from the centre of the road.	A standard (full-sized) Channelised Right Turn & Auxillary Left turn treatment on the Castlereagh Highway. This treatment widens the intersection to add a full turning lane length for vehicles turning right from the centre of the road.
Grid connection	A new 330 kV transmission line is proposed to connect the Project to the CWO-REZ Transmission Line.	Grid connection will be via the proposed CWO Transmission Project being developed by EnergyCo. The new 330 kV transmission line is no longer proposed as part of this SSD application.
Targeted capacity (solar)	500 MW (AC)	No change.
Targeted capacity (BESS)	200 MW / 400 MW-h (DC)	500 MW / 1000 MW-h (DC)
BESS design	DC-coupled battery storage units will be distributed throughout the Project Area, adjacent to the inverters.	No change.
Substation	One onsite 330 kV substation and switchyard are proposed at two possible locations, i.e. a northern and central location.	One onsite 330 kV substation and switchyard is proposed at the central location.
Photovoltaic modules	Bifacial solar PV solar panels in 2P configuration, arranged in rows utilising east-west single-axis tracking with row spacing of up to 12 m and a maximum height of 5m at full tilt.	No change.
Temporary ancillary infrastructure	<ul> <li>Temporary ancillary facilities required during construction would typically include:</li> <li>site compound including storage area, offices and meeting room, ablution facilities, canteen, and car parking</li> <li>laydown areas involving areas suitable for storing plant and equipment, and deliveries including solar panels and cable drums, and areas to support waste management activities (e.g. cardboard and timber).</li> </ul>	No change.
Transport route	Project transport will be by road from the Port of Newcastle, via the Golden Highway and then the Castlereagh Highway to the Project Area.	No change.
Workforce	<ul> <li>Construction - Approximately 270 direct full-time equivalent (FTE) and 430 indirect FTE jobs (Ethos Urban, 2022). At the Project's peak construction (up to 6 months), this is expected to increase to about 580 direct FTE jobs (Ethos Urban, 2022).</li> <li>Operation - Up to 7 direct FTE and 20 indirect FTE jobs.</li> </ul>	<ul> <li>Construction - Approximately 380 FTE jobs, with up to 420 on-site workers during peak construction (August 2027).</li> <li>Operation - No change.</li> </ul>
Construction timing	Commence Third Quarter of 2024.	Commence Second Half of 2026.
Workers accommodation	Dispersed across nearby towns and villages within the Mid-Western and Warrumbungle LGAs.	Provision of a Temporary Worker's Accommodation facility, including up to 400 bed

## CONTACT US

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