EnergyCo

Building the REZ transmission project

Central-West Orana REZ transmission project

September 2023

EnergyCo is delivering the Central-West Orana Renewable Energy Zone (REZ) to provide a clean, affordable and reliable power supply for energy consumers across NSW. The Central-West Orana REZ transmission project will involve the construction of new transmission lines, energy hubs, switching stations and related infrastructure. The new REZ network infrastructure will enable renewable energy from solar, wind and storage projects to be distributed to energy consumers across the State via the existing NSW transmission network.

Overview

Work to build the Central-West Orana REZ transmission project is expected to start in the second half of 2024, subject to planning approval. Construction will be carried out by the Network Operator in line with the project's planning approval conditions as well as relevant NSW guidelines to manage impacts to the environment and communities.

This fact sheet provides an overview of the construction activities required to build the project. It includes information about what to expect during construction and an indicative construction program.

EnergyCo has prepared an Environmental Impact Statement (EIS) for the REZ transmission project. You can find more information about how the project will be built in **Chapter 3: Project description**. There are specific chapters in the EIS about key topics including noise and vibration, air quality and traffic and transport. For information about the EIS exhibition, including details of upcoming information sessions and how to make a submission, visit energyco.nsw.gov.au/cwo.

EnergyCo's Place Managers at the existing 330 kV transmission lines near Wellington.

Construction activities and staging

1

Site establishment

- implementing environmental controls
- establishing temporary construction sites, facilities and access tracks
- adjusting and relocating utilities such as water and electricity
- removing trees and vegetation where necessary

2

Building transmission lines

- access tracks
- earthmoving, excavation work and spoil removal
- constructing footings and foundations for transmission structures
- installing transmission line structures using cranes
- stringing conductors and overhead wires
- installing communication infrastructure

3

Building energy hubs and switching stations

- earthmoving, excavation work and spoil removal
- building hardstand areas
- establishing access roads
- building support buildings and infrastructure
- electrical fit out
- fencing and finishing works

4

Pre-commissioning

- testing and commissioning new energy equipment
- testing transmission lines including point to point, earthing and high voltage testing
- connecting to the existing transmission network
- protection, control, and metering testing

5

Commissioning

- transmission line cut in and connection to the electrical network
- protection, control and metering checks
- energisation
- noise, thermographic imaging and electric and magnetic field (EMF) testing

6

Demobilisation and site rehabilitation

- removing all construction plant and equipment
- removing or handing over construction compounds and facilities
- removing environmental controls
- restoring work areas, irrigation, water infrastructure facilities and natural drainage
- rehabilitating access roads

What to expect during construction

Project duration	Subject to planning approval, construction work is planned to start in the second half of 2024 and would be completed by mid-2028. An indicative construction program is provided on the back page of this fact sheet.	Read more about the construction program in **Chapter 3: Project Description** of the EIS (section 3.5.2).
Construction area	The construction area would be around 4,000 hectares in size. This includes the total land area required for all project infrastructure, compounds and temporary construction sites.	Maps of the project construction areas can be found in **Chapter 3: Project description** of the EIS (section 3.5.1).
Work hours	Standard construction hours for the project are: • 7am to 6pm, Monday to Friday • 8am to 1pm on Saturdays • no work on Sundays or public holidays. Some activities may be required outside standard hours (known as 'out of hours' work). This may include extended work hours across a seven-day work week to accommodate a rostered fly-in fly-out and drive-in drive-out workforce. Out of hours work would be carried out in line with an out of hours work protocol to manage impacts to local communities and sensitive receivers. To support construction activities during these extended hours, operation of the main construction compounds would also be required.	Read more about work hours in **Chapter 3: Project description** of the EIS (section 3.5.5).
Workforce numbers	The construction workforce for the transmission project is expected to include up to 1,800 workers at peak.	Read more about the construction workforce in **Chapter 3: Project description** of the EIS (section 3.5.5).
Transmission lines	Transmission lines and towers will be built within a temporary easement of about 220 metres wide. This easement would then be reduced for operation of the project to between 60 metres and 200 metres wide dependent on the infrastructure in each location. Work would take place progressively and landowners will be informed about the expected timing and staging prior to construction starting.	Read more about how the transmission lines and towers will be built in **Chapter 3: Project description** of the EIS (section 3.5).
Construction compounds and ancillary facilities	Construction compounds will be located at the Merotherie energy hub, Elong Elong energy hub, New Wollar switching station and Neeley's Lane. The compounds would include staging and laydown areas, parking, stockpiles and materials storage, offices and staff amenities, helicopter landing pads and various plant and machinery. Ancillary construction facilities would be required at the 330 kV switching station sites and along the transmission line easement at each transmission line tower site.	Read more about construction compounds and ancillary facilities in **Chapter 3: Project description** of the EIS (section 3.5.7).

Workforce accommodation camps

Temporary workforce accommodation camps will be located at:

- Merotherie Road, Merotherie (up to 1,200 workers)
- Neeleys Lane, Cassilis (up to 600 workers).

Each workforce accommodation camp will include demountable accommodation and office buildings, staff amenities, utilities, parking areas and bus stops, materials and equipment storage, generators and other items. Workers will travel to and from the camps in mini buses and light vehicles.

Read more about the proposed workforce accommodation camps in **Chapter 3: Project description** of the EIS (section 3.5.7).

Construction traffic on local roads

Construction vehicles would use the existing local road network to access work sites, energy hubs, switching stations and workforce accommodation camps. This is expected to have a minor impact on local road network capacity. Some roads and intersections may require adjustments to facilitate construction vehicle movements.

A limited number of oversized and overmass (OSOM) deliveries would be required for certain plant and equipment, such as transformer units for the energy hubs. These may be accompanied by escort vehicles operated by accredited drivers or NSW Police.

Pre-condition surveys will be carried out on local roads prior to construction and any maintenance or repairs would be carried out in consultation with the relevant council.

For more information on OSOM vehicle movements for the REZ transmission project please view the Port to REZ fact sheet on our website at energyco.nsw.gov.au/cwo.

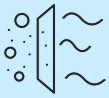
Read more about construction traffic in **Chapter 17: Traffic and transport** of the EIS (section 17.5).

Noise and vibration

There may be temporary noise and vibration impacts for local communities near construction areas. Mitigation measures will include:

- monitoring noise and vibration levels to ensure they are within acceptable limits
- community notifications and consultation
- carrying out noisy activities during less sensitive times and providing respite periods
- respite periods and time restrictions on noisy activities.

Read more about construction noise and vibration in **Chapter 15: Noise and vibration** of the EIS (section 15.6 and 15.8).



Dust and air quality

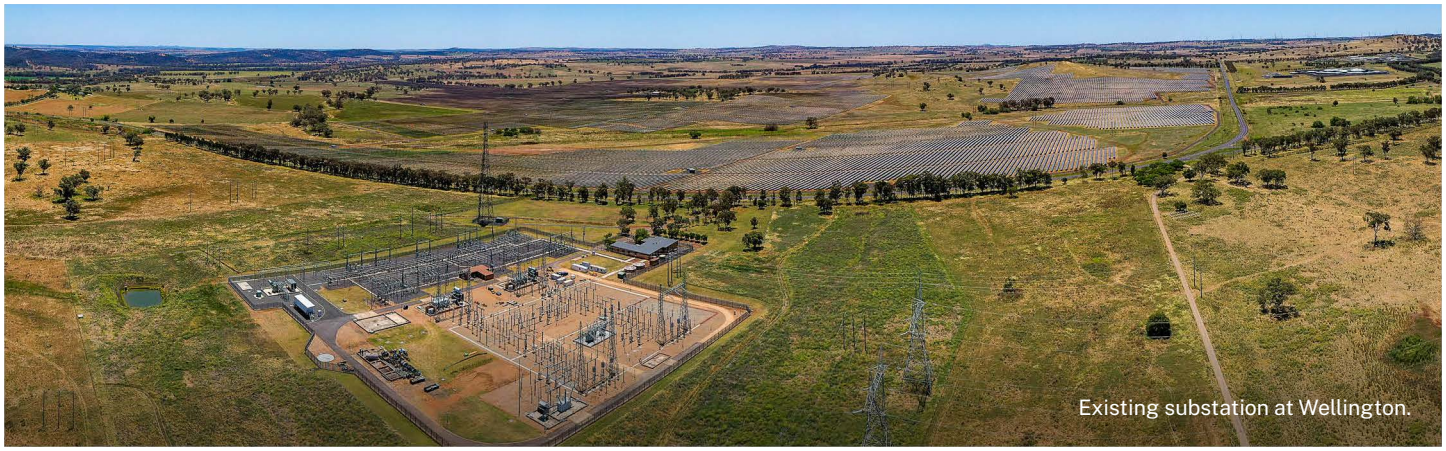
Dust can occur from construction activities such as earthwork, vegetation clearing, vehicle movements and materials handling and loading. Measures to mitigate dust and air quality impacts will include:

- spraying water to minimise dust
- covering loads and stabilising disturbed areas
- limiting vehicle speeds on unsealed roads
- sealing sections of roads.

Read more about how dust and air quality will be managed in **Chapter 19.4: Air quality** of the EIS.

Indicative construction program

Activity	2024	2025				2026				2027				2028	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Enabling works															
Utility diversions															
Clearing and access roads and gates															
Construction of workforce accommodation camps															
Energy hubs and switching stations															
Clearing															
Access and earthworks															
Foundations and pads															
Electrical construction works															
Transmission lines															
Clearing and access															
Foundations															
Tower installation															
Transmission line stringing															
Pre-commissioning and commissioning															
Demobilisation and site rehabilitation															



Existing substation at Wellington.

About EnergyCo

The Energy Corporation of NSW (EnergyCo) is a statutory authority responsible for leading the delivery of Renewable Energy Zones (REZs) under the NSW Government's Electricity Infrastructure Roadmap. For more information, visit our website at energyco.nsw.gov.au/about-energyco.

Contact Us

For more information about the Central-West Orana REZ project, you can visit our website or contact the project team:

- cwo@energyco.nsw.gov.au
- 1800 032 101
- energyco.nsw.gov.au
- If you need help understanding this information, please contact the Translating and Interpreting Service on **131 450** and ask them to call us on **1800 061 114.**

EnergyCo wants to hear what you think about our plans. If you have questions or want to give feedback, please get in touch with our team. You can find more information on our website by scanning the QR code or by visiting energyco.nsw.gov.au.

NSW Department of Planning and Environment / Neil Fenelon.